INTERIOR DEPARTMENT APPROPRIATIONS FOR 1954

HEARINGS

BEFORE THE

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS HOUSE OF REPRESENTATIVES

EIGHTY-THIRD CONGRESS

FIRST SESSION

SUBCOMMITTEE ON INTERIOR DEPARTMENT

BEN F. JENSEN, Iowa, *Chairman*

IVOR D. FENTON, Pennsylvania
HAMER H. BUDGE, Idaho
MICHAEL KIRWAN, Ohio
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CARSON W. CULP, *Executive Secretary to the Subcommittee*

PART 1

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U.S. Congress

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UNITED STATES
GOVERNMENT PRINTING OFFICE
30433 WASHINGTON : 1953

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INTERIOR DEPARTMENT APPROPRIATIONS FOR 1954

SECRETARY'S STATEMENT

TUESDAY, FEBRUARY 24, 1953.

WITNESSES

HON. DOUGLAS McKAY, SECRETARY OF INTERIOR
HON. ORME LEWIS, ASSISTANT SECRETARY OF INTERIOR
D. OTIS BEASLEY, ADMINISTRATIVE ASSISTANT, SECRETARY OF INTERIOR

Mr. JENSEN. The committee will come to order.

We have with us today, our new Secretary of Interior, the former Governor McKay of the great State of Oregon.

INTRODUCTORY STATEMENTS

Mr. Secretary, we are happy to have you here. The members of the committee have already met you I am sure, and for myself, I have known Mr. McKay for a few months. I, of course, knew of him long before I met him last August in Oregon when I was on a tour with the Bureau of Land Management.

Mr. McKay and I were on the same tour together in the timber lands of Oregon, and I recall one evening we were together at a very nice banquet. I believe that was at The Dalles, Oregon. At that time I had the privilege and pleasure of hearing Mr. McKay make a very fine talk. Little did we think at that time that you were going to be sitting across the table from us today, Governor. You will have to excuse me if I call you "Governor," because I have gotten in the habit of doing it.

I am, of course, glad to see you here, Mr. Secretary.

I know you have not been in office long enough to make any positive statements, or that you do not want as yet to make any positive statements about your responsibilities. The Department of Interior is composed of 10 separate bureaus and each one of them is subdivided into many agencies. Consequently, it takes quite some time to really get an understanding of the different functions of all these departments.

I know that you have been greatly interested in many of the things in your State that now come under your jurisdiction, which is going to help you, and us, and the country a lot.

We generally hold hearings each year for about 2 months. Sometimes longer, going through all these hundreds of items. We try as best we can to learn what the justifications are for every dollar that is contained in the budget request. I think too often we have not been able to ascertain just how much money we should spend in many of these departments. As Congressman Kirwan has said many times, this is the "All American" Committee. We appropriate only for the

things that are good and beneficial to America. Many times we have been quite liberal in appropriating money for the development of the West, especially. We never tried to take the "meat axe" approach, and I do not think we will do it this year. I do not think you want us to do it.

We want to work with you, Mr. Secretary, to appropriate as nearly as possible the right amount of money and the amount of money that this Nation can afford to spend for this agency. I want you to know you will have the cooperation of every member of this committee, because I know their will and I know their feelings on both sides of the political fence.

We are starting the hearings again this year with the purpose in mind, of doing the thing that is best for our country.

I shall ask Mr. Kirwan if he would like to make a statement at this time, before the Secretary speaks to us.

Mr. KIRWAN. I would like first of all to wish you good health, without which you cannot accomplish anything. But with good health and your knowledge of reclamation and other problems of the country, we know you are going to make a good Secretary.

Secretary MCKAY. I want to do the best I can, sir.

Mr. KIRWAN. I know from being on this committee for the past 10 years, with other of the men who are here, that you will be given every consideration in your requests. We hope to live up to the requests that you make of us and shall make every effort to cooperate with you and your Department.

Secretary MCKAY. Thank you.

Mr. FENTON. I certainly wish the Secretary all the luck in the world. I have no doubt that he will make a fine Secretary and we wish him well.

Secretary MCKAY. Thank you.

Mr. BUDGE. Mr. Chairman, I am particularly happy to welcome the Secretary to Washington, in view of the fact that he comes from our neighboring State of Oregon. We know a great deal about the Secretary's fine record in the past and we know that he is embarking upon a program which will be for the benefit of the West and the benefit of the United States. I am happy in the short time I have been on this committee, to have learned that the membership of this committee is extremely sympathetic to the needs and the wishes of the West. I wish you the best of success.

Secretary MCKAY. Thank you, sir.

Mr. JENSEN. I do want to say that I am sorry that our other member, Congressman Norrell of Arkansas, is not in attendance. He is in attendance at another hearing this afternoon. I am sure you will find that Mr. Norrell is a fine, patriotic gentleman and anxious and willing to cooperate with you in every way possible. Mr. Norrell has also been on this committee for, I think, 10 years.

BACKGROUND OF ASSISTANT SECRETARY LEWIS

Now, you have one of your assistants with you, I believe, Mr. Secretary, Mr. Lewis.

Secretary MCKAY. Yes, sir.

Mr. JENSEN. Would you give the committee the benefit of a little of your background, Mr. Lewis.

Mr. LEWIS. I would be glad to do it. I am from Arizona. I was born in Arizona and my family came out to Arizona in the 1860's. I have practiced law there since about 1926, when I finished law school at George Washington University here. Before that, I went to Stanford for a short time. I spent all my life there with the exception of 5 years that I lived here, during which time I worked as a clerk in the Department of Justice, in the usual manner that most of us did who have gone to school here.

My family on my mother's side has been connected with irrigation in Arizona for many years. We lived in Phoenix and that is where most of the family lived. They have been interested in irrigation since the very beginning of irrigation and some of them dug the first canal and were active in the Water Users Association in Phoenix, which was the beginning of the reclamation project.

As for myself, my practice has been somewhat the general practice that you have in a smaller community. It has leaned toward the corporate and business law side. I am a member of the firm of Lewis, Roca & Scoville. Our work was more or less divided up, and as a member of the firm I have had to do with irrigation projects from time to time, as a lawyer would in a community of that kind.

I have not held any political offices, though I did serve a term in our legislature, but they threw the Republicans away in Arizona some 23 or 24 years ago. I have indulged in politics during that period of time, but certainly as an avocation, because that was the only way a Republican could indulge in politics in Arizona. I have held political positions, such as State chairman and I have been general counsel for the State committee for quite a long time.

I have indulged in the usual civic activities of a person in a community, such as the chamber of commerce and other civic organizations.

I do not know a great deal about the Indians, but I have lived around them and I know them in that way, because we have 75,000 of them in the State and I have been over their reservation countless times.

So far as the national parks—I mention these things merely because they have something to do with the assignment I have in the Department. I know the national parks and know people who work in them because I think we have more national parks and more national monuments than any State in the country.

So far as public lands are concerned, I think that is about all we do have in Arizona. So we run up against that rather constantly.

I have had very little activity in business, outside of my practice as a lawyer. I was on the board of a local power company and I am no longer on that board, nor do I any longer own stock in that company. I had the compliment paid me by a local newspaper in putting a little headline in and it said "After you, Mr. Wilson," that was after the Senate committee suggested I discontinue my connections, financially or otherwise, with the power company. But, it is a locally owned outfit. In that capacity I did become somewhat better acquainted with some of the Indian public land problems, as they naturally conflicted in some instances.

I think that gives a rough picture of my background.

Mr. JENSEN. We are glad to have you here, Mr. Lewis.

Mr. LEWIS. I am very glad to be here.

Mr. JENSEN. Now, Mr. Secretary, as I said before, I know you do not have a lot of specific things to talk about today, but we would like to hear any general statement you care to make.

SECRETARY'S GENERAL STATEMENT

Secretary MCKAY. All right, sir. First of all, I want to thank this committee for the good treatment I have received since I have been here, and I, too, want to pledge my cooperation to the committee. Having spent 14 years as a State senator, I have the legislator's point of view.

Prior to that time, I served for a couple of years as mayor, which was a gratuitous job—no pay and a lot of grief—in 1933, and we had to use the meat ax then. Then, I have been Governor for 4 years. As Governor, our policy was to render good service at the least possible expense, within our ability to pay. I do not believe any family, or any business, or any government can live beyond their means without going broke ultimately. I do not criticize the past administration, because business is in the same shape. I still own a major portion of my business—it is family owned by my wife and myself and my two daughters—but I do not draw any paycheck out of it, and that business is almost 26 years old.

Under prosperity we get into some loose habits. We do not go broke in bad times. We go broke in good times. I feel with both business and government that we have been a little careless in the past years, because everything was rosy. I think the time is here when we should start checking to see where we are. I have checked the State of Oregon for 4 years in trying to do better work with less money. I never found any place in the State where we did not have good government. I never found any place where there was a big item you could not cut out of the bugdet. We cut out a lot, but by being frugal we cut out waste. We cut out waste wherever we found it, but we have to look at all these things. I do not think it is logical at the moment to say we will have a 10-percent cut across the board. I think we have to go at it item by item in the departments and pick out the essential from the nonessential.

Now, Mr. Beasley knows this thing very, very well. He has been working on it, and we have been working on it with the Budget Bureau and will have the revised budget shortly. Of course, you know what the administration has done to try to hold some of the things down. I did something else; I have just issued an order that there would not be any more contracts signed for over $10,000 without checking with the Secretary. It was not done for the purpose of slowing down the program, but I felt we should have another look at such contracts.

I am very strong for conservation of natural resources, and I do not mean locking up as some people think, but we must get the most out of our natural resources. We have got to be frugal with our natural resources, because there aren't any more. There is not any more land in the West or any place else in the United States that has not been put to use, that is, farmland. We must do a better job of husbanding the farmland.

One of the things we must do is to continue reclamation projects to bring in some additional land to produce the food the Nation needs.

I am very strong in doing that. We should preserve the things which we as westerners cherish in the way of parks and things of that character, because it is a monument to nature, and they should be preserved as a matter of recreation for succeeding generations. I am very strong for that sort of thing.

I just want to say this: I feel that you and I think alike on these things and we are going over these issues very carefully and any suggestions you may have, I shall be glad to have them. I might argue with your stand, but we will try to arrive at the proper conclusion. We are trying to do the same thing, but we hope to get better acquainted with the financial aspects of the Department, so I will know what I am talking about, but it does take a little time.

I was surprised when I came here of the things which this Department takes in. It really is terrific. I do not think there is any department more essential to the welfare of the people than the Department of the Interior, and everyone back home knows all the answers, so I get myself in a lot of jams.

I will enjoy working with you. I never thought I would be in Washington and never wanted to be here, as a matter of fact, but here I am. I will do the very best I can to do a good job. I am used to criticism and anytime anyone has anything to say to me, they do not need to spare my feelings. I have been insulted by experts, and I do not like people to "yes" me. I like people that tell me the truth as they see it. So, I think I am going to enjoy this work, and I hope my health survives it.

Mr. JENSEN. That is fine, Mr. Secretary, and I know that that statement is very pleasing to every member of the committee.

APPOINTMENT OF MR. AANDAHL

Secretary MCKAY. One other thing I would like to mention to you: Has this committee met Mr. Aandahl?

Mr. JENSEN. Yes, sir, indeed.

Secretary MCKAY. He is at your service also.

Mr. JENSEN. I might say I certainly was pleased when you took Mr. Aandahl in as one of your assistants. He served here and he was Governor of the State of North Dakota. It was my privilege to meet him up there on several occasions, and then he was elected to Congress, and we served with him here 2 years. He endeared himself in the hearts of every Member, I am sure, on both sides of the aisle and he is a fine man and an able man.

Secretary MCKAY. I knew him as Governor, and then I served on the governors' conference executive committee with him. While he was not a personal friend of mine, I know him, and I have a very high regard for him. The Under Secretary will not be here until about the 1st of April, but I believe he is worth waiting for.

BACKGROUND OF UNDER SECRETARY TUDOR

Mr. JENSEN. That is Mr. Tudor?

Secretary MCKAY. Yes, sir. He is a man of unusual integrity. He has never been linked up in any of the controversial things. As you probably remember, he was one of the Army engineers at Portland. He graduated from West Point and resigned from the

Army and became a civilian engineer and took graduate work in hydraulics. He designed the bay bridge in San Francisco, and he has also had administrative experience. When the war came on, he offered his service back to the Army and served as district engineer at Portland. Since then he has been in a private firm in San Francisco. He also has a branch in Oregon. He is in charge of that Dalles bridge which has been built by revenue bonds between Oregon and Washington, and the reason he is so long in coming here, he has to divorce himself from that business and that is not easy, because a partner just died, but no one has any more quality and honesty or ability as an engineer. I think with his administrative experience he will do a very good job. As to how long I can keep him, I do not know, but he will stay long enough to get the thing well organized, and he may stay as long as I do, or longer, but I am very well sold on his ability and his integrity. There is one assistant secretaryship that has not been filled yet and I have to get that done in a few days, but Alaska has been giving me a little trouble and some of the other things.

Soil Conservation on Public Lands

Mr. Jensen. I do not particularly want to go into anything specific, but you know I have a pet in the Interior Department and that is soil conservation on our public lands. We have never appropriated enough money for that work, and that sounds funny coming from me, with the reputation, I think, of being very careful in money matters. We have all of these millions of acres of public lands under the jurisdiction of the Interior Department, and we have been appropriating about a penny an acre for soil and moisture conservation. The result is that our public domain has been blowing away and washing away. The topsoil is about gone on a great majority of those millions of acres. How many acres are there of this land?

Secretary McKay. Something like 170 million in the continental United States.

Mr. Jensen. We have put the Indians out on land that was terribly poor and each year it has gotten poorer and less productive, except that part which the soil-conservation branch of the Interior Department has worked on. Where they did spend some money and showed the people how to conserve their soil, the Indians have made great progress and they have increased tremendously the crops that are grown on those acres.

So, having considered soil conservation not only on public lands, but on private lands, having soil conservation in my blood, and having seen the terrible erosion that has been going on in this Nation of ours, I have felt it a duty and responsibility to try to help see to it that it was stopped, not only on private lands, but on these public lands that come under the jurisdiction of your Department and this committee. I just wanted to mention that to you.

Secretary McKay. I agree with you, Mr. Chairman. I happen to have to have graduated in agriculture from Oregon State College in 1917. So, I have an interest in the soil. But the public domain, both the Forest Service and in these lands of the Department of the Interior, must be taken care of, and in this kind of deal, I am not afraid to stand up and say we have got to invest some money in this.

I think we can save some money in other places where it is not as essential, but some of the basic resources of this country, we have to protect them.

I have seen some interesting experiments on the range where the Forestry Department was conducting experiments on drouth-resisting plants. Some of this land has grown up in sagebrush as a result of overgrazing.

I met with the Advisory Board to the BLM the other day, and they have an idea that may be good. I do not know whether they are trying to get a bill introduced on it or not, whereby there will be a little better leasing policy with the stockmen. Under such a lease he would put some of his money in waterholes and grazing and soil conservation and fencing, etc., and in that way they could get a little better lease from the Government and, in other words, save by incentive methods. I think they have something, if it can be worked out. I do not know the full details of it, but these fellows are doing a good job. I know as far as I was concerned, I would be very liberal in writing the ticket for the operator of the lease in leasing this land to good operators, but I would be awful rough in enforcing the regulations. If we have people that are not doing their share on this land, we have got to be tough with them. We have got to save our ranches.

Mr. JENSEN. Well, I certainly agree with you on that statement.

TIMBER CONSERVATION

Secretary MCKAY. I want to say, also, the people in Oregon feel that the BLM has done a good job in handling the timber. They have been rather progressive in selecting stumpage the last few years. The only thing that has held them back is lack of access roads, and sometimes, lack of enough staff to get out and salvage it, but the way stumpage has been in the last few years, they will come out fine. We want them to remain on a sustaining yield basis and to keep it on that basis. They are not up to as high a cut yet as the land will sustain. I think last year, about 50 or 60 percent of the growth was sold. They have to watch for fire, pests, and disease. I hope too live long enough to see my State and Washington—those two big lumber States—get the whole thing on a sustaining yield basis.

In the last 11 years, I believe, since they started tree farms, there are 6 million acres now of private-enterprise tree farms in the Northwest. First, they just went through and cut it over. Of course, they did that in Washington, and we learned some by that experience. We are spending ourselves in Oregon $10,500,000 of money that the people voted for bonds to reforest the Tillimook burn area, which is the largest reforesting project ever attempted on the North American Continent. We did it ourselves. The States and the Federal Government and private enterprise have got to do that in the forestry industry.

Mr. JENSEN. You have a program up there which is called——

Secretary MCKAY. "Keep Oregon green." It is funny that a slogan like that can do so much. We copied that from Washington. They had a slogan "Keep Washington green" and about a month later we started. That was 8 or 10 years ago—maybe more—and that little slogan has just worked wonders in doing a job. Of course, there has been more timber destroyed than has been harvested in

about 110 years, since man has been out in the Northwest, and fires, insects, and pests have taken their toll. Congress has appropriated money for the spruce budworm, hundreds of thousands of dollars, and private enterprise has put up thousands of dollars in this program. We spray these trees, because you have got to stop it or we are gone. It has worked very well. We have a fine forestry board in the State, and we have good cooperation from the operators, particularly the big operators, because the big operators can do things that little operators cannot in the way of tree farming, but all of those things are part of a pattern we have to follow if we are going to survive with our resources.

(Discussion off the record.)

Personnel Management

Mr. Jensen. I see Mr. Beasley and Mr. Larson are with you, Mr. Secretary. We have known those two gentlemen for many, many years. We know of their work in the Department and their interest and sincerity in the job they have been doing. We also know of others of your Department who have been in the Department for years, many of them doing good work. There may be some others there that we could not give quite that good a recommendation, but we do know Mr. Beasley and Mr. Larson.

I understand Mr. Beasley is staying with you down there.

Secretary McKay. Yes, sir.

Mr. Jensen. Is there anything you would want to say about that?

Secretary McKay. Well, my view of government is that a man in an administrative position like Mr. Beasley should be removed only for inefficiency, not for political reasons. I think the administrative part should go on, regardless of who runs the administration. As long as Mr. Beasley does a good job, I shall defend him and I expect to keep him. He does a very good job. The overwhelming majority of Government employees are good people, particularly the technical people.

I think in the Department of Reclamation we have some of the best engineers in the country. I know we have the most. They tell me we are the largest employer of engineers of any outfit in the world, or in the United States. These people have spent their lives in this work. If there are any bugs along the line, we would like to find them and we can get rid of them. We want to do the best we can to clean out the deadwood, but I am not one of those that labels all Government employees as a bunch of incompetents, because I have a very high regard for them and I defend them.

(Discussion off the record.)

I defend good pay for good people. I do not think any business ever went broke paying good people good money. Businesses go broke by paying a bunch of bums small salaries.

I should not say this now, because it may sound funny, but I am going to say it anyway: I think as a general policy we do not have enough of the higher supervisory brackets of people. For instance, there are only four Assistant Secretaries in the Department for that vast organization. I am not going to make it a recommendation, but I think we have to take care of the topflight people, the supervisory people, to keep the good ones.

I was a director of personnel in World War II, and we had lots of civilian employees. My observation was that if anyone should stumble on the post we would give him a job at the top rating we could give, which was $150 a month for a clerk-typist, who could just pound a typewriter. It was very difficult to take care of the supervisors, to get their pay raised. They were the most valuable.

I think the same thing probably applies today, as I look over the records down there. We do not have a big enough percentage of the attractive pay schedules for our supervisory people.

However, as I say, I do not want to come in and ask for things like that at the beginning, but I think we have to continue to develop incentives for Government employees to stay with the Government. If the good ones leave for more attractive positions outside, pretty soon we end up with the drones. I think we have to pay money for good people.

I would also like to say that I wish we had a better system of getting rid of some of the less efficient people. I would not say that should be at my whim. We used to have an old system in World War I we called the benzine board.

Mr. JENSEN. Yes; I know about that.

Secretary MCKAY. That was a combat zone. We did not fool with any poor officers. Off the record.

(Discussion off the record.)

Secretary MCKAY. Another thing I should like to say is that the supervisory people have to take the initiative and the responsibility of really rating these people. One of the troubles is that these people in the supervisory positions just have to have guts enough to call these people in and talk to them. If it were their money, they would do it. They would say: "You are not doing a satisfactory job. Your rating at the end of this period is not going to be good unless you pick up."

They have to exercise some supervision. But, in return for that, we have to pay them comparable rates with outside. You cannot compete with industry, because we have many things in Government that private enterprise does not have, such as security, but they have to be comparable.

Mr. JENSEN. Governor, I agree with you perfectly, but do you not think that before we can start paying these people what they are actually worth it is going to be necessary in many instances, in a number of units in the Interior Department, to ascertain to what degree these agencies are overstaffed at the present time.

Secretary MCKAY. Oh, yes. I would not recommend such a thing today. I say that is what we have to work toward over the long haul.

The first thing we have to do now is to review the situation. I think we can cut down our budget substantially by a careful analysis. Mr. Beasley is already working on some things down there. All his advice to me has been in the interest of economy. We can weed out some of these people we do not need.

Mr. JENSEN. Yes.

Secretary MCKAY. Wherever there is a surplus on the job, let us get rid of it. Once we have done that, then we can come to the position of offering some rewards, perhaps, such as better pay for better performance.

The Government will spend less money than it has been spending the way we have been going. I do not say that only about the Government. If I were back running my own business, I would operate that way.

I only have 90 employees, but you have to pay them every Saturday night, and it must come out of the profits. We cannot fool around. We have made so much money in the last few years, and now we are going to get down to a competitive economy. I do not know whether the salesmen in my place of business can sell automobiles any more or not. I will have to see that. I will not be there, of course.

Only the fellows who are well financed, who have been through this, can survive. A lot of people have gotten in business in the last few years who have not a whisper of a chance.

I think the same thing applies to Government. We have been riding away with prosperity, and we are getting a little careless.

Mr. JENSEN. Yes; I am sure of that.

Secretary MCKAY. Off the record.

(Discussion off the record.)

Mr. JENSEN. Is there anything you would like to say, Dr. Fenton?

REVISION OF BUDGET

Mr. FENTON. You say you are working on a budget now, Mr. Secretary?

Secretary MCKAY. A revised budget.

The Bureau of the Budget is trying to get all of us to get out a revised budget. How soon will that be available?

Mr. BEASLEY. Our deadline for submitting our recommendations is next Monday, but it will take the Bureau of the Budget at least two weeks, I feel, to complete the review of our recommendations.

Mr. FENTON. The reason I ask that, Mr. Chairman, is that I see we have a schedule here for hearings. I do not see the necessity of duplicating the work.

Mr. JENSEN. Well, Mr. Fenton, the chairman of the committee, Mr. Taber, has asked each subcommittee to start the hearings and to take up first the budget requests for such agencies as are not controversial in nature.

I am sure that for each agency of Government the revised budget will possibly make recommendations, even on some of these smaller agencies which we are hearing and will hear for the next 2 weeks. Those recommendations will come to this committee before we mark up the bill and before our hearings are terminated. When that time comes, this committee and the other subcommittes of the Appropriations Committee will take each item into consideration.

Here we have the Connally Hot-Oil Act, "Research in utilization of saline water," "Fishery research," and the Commission of Fine Arts. They are all in relatively small amounts and are for small agencies.

Then we will have the Geological Survey tomorrow. Now, that is a very important agency, but this committee has always had the highest regard for the efficiency and the economy which has been practiced in that agency, I might say, Mr. Secretary.

Secretary McKAY. The Geological Survey?

Mr. JENSEN. Under Dr. Wrather.

Secretary McKAY. Yes, sir. It is very good.

Mr. JENSEN. We have the National Parks. Now, they are asking for some funds for roads and parkways and things like that which might be controversial.

There is the Fish and Wildlife Service. There is not going to be any great change in that, I suppose.

Next comes the Bureau of Land Management. That, of course, is a very important bureau; that comes on March 2.

Then there is the Bureau of Mines, which you will handle, Congressman Fenton.

Anyway, we are putting the agencies of the Department of Interior where there can be considerable revision or where there might be controversy toward the last, to give you a chance, Mr. Secretary, to learn as much as you can about these, as well as to give us an opportunity to wait for the revised budget. I think it is going to work out all along. If we do not start hearings for another 3 weeks or a month, we will be here until Christmas.

Secretary McKAY. Yes.

Mr. JENSEN. So, it is almost a necessity to do this as we are doing it.

Whatever revision of the present budget comes up here from the new administration we can consider as a committee at any time. Therefore, I see no reason why this will not work out all right.

Mr. Budge, did you have anything to say?

Mr. BUDGE. No, except that I am sure the committee will more than welcome any downward revision which the Secretary can find.

Secretary McKAY. We will do our best to find such revisions.

I agree with the chairman. You have to go ahead with your work. But we hope that we will be able to come along with some advice in 2 or 3 or 4 weeks. If we do, it will be very simple for you to adjust the budget you have scrutinized already. We will do our very best to cut where it is possible.

Mr. JENSEN. Mr. Kirwan?

Mr. KIRWAN. I have nothing, Mr. Chairman, except that I should like to say that I enjoyed meeting the Secretary. I also enjoyed hearing Mr. Lewis, and I hope to work and get along with both of them and to enjoy their friendship.

Secretary McKAY. Thank you.

Mr. JENSEN. I am glad the fifth member of this committee, who is a very important member, has now arrived. This is William Norrell, of Arkansas.

Secretary McKAY. Yes, sir.

Mr. JENSEN. He has been on this committee for 11 years. Mr. Norrell is from Arkansas.

(Discussion off the record.)

Mr. NORRELL. I have one question only, Mr. Secretary. I do want to repeat what I have already written you. The more I read about your conduct and opinions and decisions, the more convinced I have become that you are going to make a good Secretary of the

Interior. I do not mind, even as a Democrat, going on record to that fact. I like the way you have started out. I like it because it is in keeping with much of my own thinking.

The question I want to ask you is this: Are you going to review those budget estimates for the several departments and give us the benefit of your recommendations before the time comes to write this bill?

Secretary McKAY. Yes, sir. That is in the process of being done now by the staff in the Department. I have not had time to do more than glance at the budget.

Mr. NORRELL. That will reach us, though, by the time we get ready to write the bill?

Secretary McKAY. Yes. Our deadline for this report to the Bureau of the Budget is next Monday. Then it will take them a little while. In the meantime, Mr. Beasley and I have discussed it, with the idea of trying to wring out all the water.

ELECTRIC POWER

Mr. NORRELL. Probably you have gone over this subject. I am not sure of that, and I am sorry I did not get back to hear all of your statement. However, have you any set formula which you would care to recommend to us, regarding the construction of transmission lines, as to the circumstances and conditions under which you will recommend that transmission lines be constructed?

Secretary McKAY. Well, that is a very ticklish subject. There are three decisions which I have to make in the first few months in this office which are very controversial, and upon which this administration will stand or fall on the idea of power.

One is the surtax that the private utilities are charging their customers now up in the Northwest. One is the Georgia Power case. The third refers to things like the controversy before the Federal Power Commission on Hells Canyon. Idaho Power made an application for Ox Bow, which will be in the middle of a lake 93 miles long, created by Hells Canyon if and when built.

To me it seems logical, if there is a question about the economics of the engineering of that Hells Canyon Dam, that we should be able to find out about it. I have not taken a position, as Governor, for or against it. I said: "There are some arguments. Let us look at the record and review the case."

Those things are so fundamental to the whole power issue of this country that when I make those decisions I am going to have Cabinet approval to discuss them.

Mr. NORRELL. In other words, summing it up, I think we mean that the Government should not offer unfair competition, but there should be a fair supervisory action to see that neither the public nor private power takes an unfair advantage of the other.

Secretary McKAY. That is right.

Mr. NORRELL. Nor of the general public.

Secretary McKAY. In my own territory out there we have the privately owned power companies and the publicly owned power companies, and they all turn power in with the Northwest power pool. Of course, in that case the Government built the transmission lines.

They have a public preference clause which is just, because the public money built the thing.

But, on the other hand, the end results have not been fair, because in the one case people who happen to be customers of the privately owned power companies are paying a 20-percent surtax at the time of year that the bills are the highest, due to the water shortage that occurred last year, about 4 years before the cycle should have turned around. I do not care what they say; that just is not fair to the customers.

Likewise, our policy should not be to try to freeze out the privately owned power companies. Now, the privately owned power companies cannot expect anything out of me but a fair shake, and the good ones will not ask any more. Some of them will. They can expect fair treatment.

The Federal Government should be the last word in integrity in dealing with all ofthese people.

I say that people any place, in your State or in mine, if they want to go about it and own their power distribution systems, have that as their privilege; but the Federal Department of the Interior should not be trying to force them to do it.

We have not been too fair. For instance, the privately owned power companies have been getting along with Bonneville on a 1-year contract. I had a meeting with Dr. Raver last year, and the privately owned power companies would like to get together with them. They want a long-term contract. Now they have a 5-year contract. That is not enough yet, because they are financed over a long period of time. They earn a very small amount on capital investment.

Of course, I have lived for 26 years as a dealer with a 1-year contract. I would like to get a 5-year contract, but I cannot.

I do not believe in monopolies, either on the part of the power companies or on the part of the Government. A little competition would do us good. But I do not think the power companies should move in and try to take over this thing.

Some people say I am a tool of the power companies. They will find out I am just as tough with Electric Bond & Share as I am with the PUD.

Let me say that we have in my State one of the best examples of municipal ownership I know of. The city of Eugene started with $35,000, and that is worth $15 million today. There was no promotional activity of selling revenue bonds. The businessmen run it on a very businesslike basis. They have been very successful. You never read about it in the newspapers, but if the people want to do that, that is their privilege. However, you cannot force them to do it. We have to be absolutely fair to both sides, the privately financed and the publicly financed.

Mr. Norrell. That is a very good statement. This subcommittee has had a lot of trouble over that one question. I guess that has been our major worry.

I know in my own area we have had an argument going on for a long time about whether or not the law would permit the Southwestern Power Administration to do certain things. I am advised that the Supreme Court of Arkansas yesterday rendered a decision, which was unanimous, saying that they could not do what they wanted to do.

Now, I have not taken any side in that either way. I have simply been neutral. I told them either to get a law to do what they wanted to do, or to get a Supreme Court decision which would justify it, and then I would go along with the appropriations. I thought we should either have a statute to authorize what they were tyring to do or, if the existing law said so, we should get a Supreme Court decision on which they could base their actions.

They went to court, and the court yesterday unanimously held against them. I think a lot of our troubles would be over if we would go according to law; or, if the law is uncertain, we would get a decision of the Supreme Court before we start.

New Solicitor

Secretary McKay. I should like to add to what I said, that the Solicitor whom I have selected, and who has been confirmed by the Senate, was the attorney general of the State of Nebraska in 1934. He is a man of about 62 years of age.

Nebraska, as you know, is all public ownership of power. He has been their attorney. He is a private practitioner now. He has one of the very large law practices in the State of Nebraska. He has been the attorney for this public ownership. In spite of the fact that he at heart is a private ownership man, he has had both sides of the thing.

Mr. Jenson. He was with the private companies before, and gave the State of Nebraska such a rough time during the legislation to make that State a public power State that they decided he was the smartest man in Nebraska on the power issue, so they hired him. That is the truth about it.

Secretary McKay. I never saw him before in my life until he was recommended to me. I wanted to get a man away from my area. I told him that there were only three things I ask of an attorney. One is that he know the law. Second, he must be honest. Third, he must render decisions as he sees them and not as I want them. I will never ask my attorney to try to see what he can do with the law, for I simply want him to tell me what the law is. If it is bad, let us change it, but let us not try to evade it.

Water and Power Policies

One other thing sticks in my craw. I am too new here to express an opinion, but it seems to me that the time has come when Congress should write a water policy for the United States and a power policy, in more detail. It might avoid some of these things. That is up to the Congress to do. I have no authority there, but I believe the time is here when they could expand this policy and write it out as much as possible on both water and power in this country. I think it would save us some arguments.

Mr. Jensen. I think you are just exactly right, Mr. Secretary.

Mr. Budge. Would the chairman yield to me at that point?

Mr. Jensen. Yes.

Mr. Budge. Mr. Secretary, this morning I requested your office to furnish for the record a statement as to the projects in the Columbia Basin now under construction, those authorized and those planned

and under investigation by the Department of the Interior and the Corps of Army Engineers.

I feel just exactly as you have stated, that it is the duty of Congress after it looks at what this program amounts to, to spell out in no uncertain terms for the benefit of the Secretary of the Interior what should be done. The Secretary disposes of all the electric power. The Congress should spell out for him in no uncertain terms what should be the policy of the United States.

I am happy that the Secretary does that at the present time, but Congress can help. I think it will be very difficult for the Secretary to make those decisions without the direction of Congress by statutory enactment.

Secretary McKay. Yes. I do not think the Secretary should be called upon to make those decisions. I think the Congress should make the decisions.

Mr. Jensen. I might say, in connection with this power policy, that this committee has finally gotten very closely together in its thinking regarding the building of transmission lines. Mr. Kirwan has been the chairman of this committee for many years, and I remember very distinctly, when officials of the many private utilities of this country came before this committee, Mr. Kirwan would ask them this question: "What percent of the farmers in your area have electricity today?"

In any area where the private utilities had shown a desire and had really gone out and built the transmission lines not only to the cream areas but to the skim-milk areas, this committee went right along with their request. When they said: "Here is a line that the Bureau of Reclamation wants to build, but we are ready and wlling and able to build that line, and we will wheel hydroelectric power at a very nominal charge, for we do not want to make any profit on it."

Almost without exception during the past 3 years this committee has refused to appropriate the people's money to build Federal lines paralleling already-existing private lines, or to build in those cases where the private utilities agree and say they will build the line. We have said: "All right. Show good faith and prove it, and we will let you build them."

We have a pretty good yardstick established here. I am sure that every member of this committee will agree with me, as will the members of the Senate committee. In other words, we have been more or less adhering to this yardstick: Where the private utilities and/or REA's and/or municipalities have adequate existing transmission facilities to furnish power to the people in that area and will wheel Federal hydropower at a reasonable rate to preferred customers, as provided by law, then this Congress is not justified in appropriating the people's money to build transmission lines in that particular area.

Secretary McKay. I agree.

Mr. Jensen. That is about the yardstick we have been operating on, is it not, Mr. Kirwan?

Mr. Kirwan. Yes, I think what you have said is true for the last 2 or 3 years. There has been a much friendlier attitude between the Government and the private power companies. I think that both have gone a very, very long way together in the last couple of years. I mean that sincerely. I think in another year or so, there will be

even a greater understanding. Down through the years one has thought the other had the rights in it all alone.

Secretary McKAY. There was a lot of propaganda dished out on both sides, too. If you could wash out the propaganda and get the facts it would help.

I do not know anything about this Georgia Power case, but I am having my Solicitor investigate it. I know the Northwestern situation, because I have been up to my neck in it for a great many years. I know the principles are probably the same.

Mr. NORRELL. I do not know whether there will be complete understanding, but they ought to be able to get along together.

Secretary McKAY. Surely.

Mr. NORRELL. There is a place in our country for both public and private power.

Secretary McKAY. Yes, sir.

Mr. NORRELL. They ought to made to get along, by the Federal Government, largely the Interior Department. Sometimes it may be necessary to have a big stick, but we ought to be a fair aribtrator and not a dictator and unfair arbitrator.

Secretary McKAY. That is right.

Mr. JENSEN. Mr. Secretary, I know that every member of this committee has enjoyed this visit with you. I am sure it will prove to be very helpful to you and us and our great country.

Secretary McKAY. I am sure that it has been a very enjoyable experience for me. As I will say again, anytime you want to critize me do not hesitate. I may not agree with you, but I will listen. I am very glad to have been here.

Mr. KIRWAN. We were glad to see you.

COMPARATIVE SUMMARIES OF REVENUE, APPROPRIATIONS, AND ESTIMATES

Mr. JENSEN. We will put the usual two tables showing revenues and the summary of the present budget submission into the record at this point.

(The material referred to follows:)

Estimated and actual miscellaneous receipts and trust funds deposited in the Treasury of the United States for fiscal years 1952, 1953, and 1954

Item	1952 actual	1953 estimate	1954 estimate
1. Admission fees and concessions	$3,320,937	$3,589,126	$3,918,412
2. Hunting stamps and receipts from sale of refuge products	5,944,340	6,472,355	6,470,050
3. Grazing fees	812,987	779,500	779,500
4. Revenues, Oregon and California and Coos Bay Wagon Road lands	8,374,142	10,500,000	12,500,000
5. Sale of sealskins and other products	4,517,671	4,125,428	3,969,360
6. Oil, gas, and mining royalties and rents	48,765,732	51,699,000	53,924,800
7. Interest on and repayments to Colorado River Dam fund and other funds	5,845,116	5,985,600	5,530,600
8. Revenues from Colorado River Dam fund project	8,507,779	9,213,000	8,663,000
9. Collections, reclamation fund:			
Bureau of Reclamation	11,981,152	11,200,000	12,000,000
Bureau of Land Management:			
Receipts from mineral leasing, public lands	21,127,868	23,823,200	24,722,000
Other receipts	1,679,468	1,982,150	2,117,650
Power revenues	35,655,006	37,800,000	40,800,000
Total collections, reclamation fund	70,443,494	74,805,350	79,639,650
10. Collections, Colorado River development fund	1,000,042	----------	500,000
11. Sale of helium and of gas from helium plants	816,908	850,000	1,117,500
12. Sale of Bonneville power	35,541,730	42,679,647	45,410,000
13. Sale of Southeastern power	2,671,428	9,300,000	13,000,000
14. Sale of Southwestern power	2,557,851	5,450,000	9,680,000
15. Sale of Fort Peck power	1,543,739	1,964,500	2,012,000
16. Miscellaneous rentals, fees, and permits	2,932,413	2,718,200	2,712,200
17. Collections for services to Indians	5,525,854	4,202,035	4,197,085
18. Alaska RR. receipts	20,246,045	24,803,000	23,720,000
19. Unclassified receipts	743,671	654,680	1,379,630
Gross receipts, general and special funds	230,111,879	259,791,421	279,123,787
Less duplications [1]	33,896,341	39,173,200	41,822,000
Net receipts, general and special funds	196,215,538	220,618,221	237,301,787
All trust funds	34,494,768	28,619,835	28,139,035
Gross receipts, all funds	264,606,647	288,411,256	307,262,822
Net receipts, all funds	230,710,306	249,238,056	265,440,822

[1] Receipts duplicated are as follows:

Item	1952 actual	1953 estimate	1954 estimate
Receipts from mineral leasing, public lands collected by Bureau of Land Management included in "Oil, gas and mining royalties and rents" and "Collections, reclamation funds"	$21,127,868	$23,823,200	$24,722,000
Interest on Colorado River fund, Boulder Dam project, transferred from receipts under "Revenues from Colorado River dam fund projects"	3,498,473	3,250,000	3,000,000
Receipts from sale of power generated at the Grand Coulee Dam included in "Collections, reclamation funds" and "Sale of Bonneville power"	9,270,000	12,100,000	14,100,000
Total	33,896,341	39,173,200	41,822,000

Summary of 1953 appropriations compared with 1954 estimates by activities

	Appropriation, 1953	Adjustments	Adjusted appropriation	Decreases	Base, 1954	Estimate, 1954	Increase (+) or decrease (−), estimate compared with adjusted appropriation	Increase (+) or decrease (−), estimate compared with base, 1954
OFFICE OF THE SECRETARY								
Enforcement of Connally Hot Oil Act:								
1. Enforcement of Connally Hot Oil Act	$187,000		$187,000		$187,000	$187,000		
SOUTHEASTERN POWER ADMINISTRATION								
Construction:								
1. Construction in progress	844,500		844,500	$844,500			−$844,500	
2. New construction and additions	115,000		115,000	115,000		6,700,000	+6,585,000	+$6,700,000
Total, construction	959,500		959,500	959,500		6,700,000	+5,740,500	+6,700,000
Operation and maintenance:								
1. System operation and maintenance	51,200		51,200		51,200	100,000	+48,800	+48,800
2. Power marketing	113,500		113,500		113,500	150,000	+36,500	+36,500
3. Purchase of power and rental of facilities	495,000		495,000		495,000	1,390,000	+895,000	+895,000
4. General administration	100,300		100,300	3,000	97,300	100,000	−300	+2,700
Total, operation and maintenance	760,000		760,000	3,000	757,000	1,740,000	+980,000	+983,000
Total, Southeastern Power Administration	1,719,500		1,719,500	962,500	757,000	8,440,000	+6,720,500	+7,683,000
SOUTHWESTERN POWER ADMINISTRATION								
Construction:								
1. Construction in progress	1,180,000	−$218,000	962,000	962,000		385,000	−577,000	+385,000
2. New construction and additions	1,840,000	−105,000	1,735,000	1,735,000		1,115,000	−620,000	+1,115,000
Total, construction	3,020,000	−323,000	2,697,000	2,697,000		1,500,000	1,197,000	+1,500,000
Construction (liquidation of contract authorization)	1,130,000		1,130,000	1,130,000			−1,130,000	
Operation and maintenance:								
1. System operation and maintenance	765,000	+200,000	965,000	30,000	935,000	1,105,000	+140,000	+170,000
2. Power marketing	110,000	−23,620	86,380		86,380	95,000	+8,620	+8,620
3. General administration	575,000	+146,620	721,620	27,300	694,320	700,000	−21,620	+5,680
Total, operation and maintenance	1,450,000	+323,000	1,773,000	57,300	1,715,700	1,900,000	+127,000	+184,300
Total, Southwestern Power Administration	5,600,000		5,600,000	3,884,300	1,715,700	3,400,000	−2,200,000	+1,684,300

Research in the utilization of saline water:								
1. Departmental activities:								
Research coordination and administration	44,000		44,000		44,000	65,000	+21,000	+21,000
Evaluation of research and processes	25,000		25,000		25,000	35,000	+10,000	+10,000
2. Nondepartmental activities: Research and evaluation of processes (consultants, contracts, and grants)	56,000		56,000		56,000	300,000	+244,000	+244,000
Total, research in the utilization of saline water	125,000		125,000		125,000	400,000	+275,000	+275,000
Fishery research:								
1. Research on fish and fisheries						260,000	+260,000	+260,000
Emergency flood and storm repairs:								
1. Bureau of Indian Affairs	125,500		125,500	125,500			−125,500	
2. Bureau of Reclamation	745,000		745,000	745,000			−745,000	
3. Geological Survey	50,000		50,000	50,000			−50,000	
4. Fish and Wildlife Service	429,500		429,500	429,500			−429,500	
Total, emergency flood and storm repair	1,350,000		1,350,000	1,350,000			−1,350,000	
Total, Office of the Secretary	8,981,500		8,981,500	6,196,800	2,784,700	12,687,000	+3,705,500	+9,902,300
COMMISSION OF FINE ARTS								
Salaries and expenses:								
1. Commission of Fine Arts	21,200		21,200		21,200	26,400	+5,200	+5,200
BONNEVILLE POWER ADMINISTRATION								
Construction:								
1. Construction in progress	41,197,000		41,197,000	41,197,000		38,982,000	−2,215,000	+38,982,000
2. New construction	19,000,000		19,000,000	19,000,000		14,218,000	−4,782,000	+14,218,000
3. General plant	2,230,000		2,230,000	2,230,000		2,000,000	−230,000	+2,000,000
Total, construction	62,427,000		62,427,000	62,427,000		55,200,000	−7,227,000	+55,200,000
Construction (liquidation of contract authorization)	4,096,400		4,096,400	4,096,400			−4,096,400	
Operation and maintenance:								
1. Maintenance of transmission system	2,768,590		2,768,590		2,768,590	3,082,186	+313,596	+313,596
2. Operation of transmission system	1,954,202		1,954,202		1,954,202	2,289,408	+335,206	+335,206
3. Power marketing	700,135		700,135		700,135	777,269	+77,134	+77,134
4. General administration	1,177,073		1,177,073		1,177,073	1,251,137	+74,064	+74,064
Total, operation and maintenance	6,600,000		6,600,000		6,600,000	7,400,000	+800,000	+800,000
Total, Bonneville Power Administration	73,123,400		73,123,400	66,523,400	6,600,000	62,600,000	−10,523,400	+56,000,000

Summary of 1953 appropriations compared with 1954 estimates by activities—Continued

	Appropriation, 1953	Adjustments	Adjusted appropriation	Decreases	Base, 1954	Estimate, 1954	Increase (+) or decrease (−), estimate compared with adjusted appropriation	Increase (+) or decrease (−), estimate compared with base, 1954
BUREAU OF LAND MANAGEMENT								
Management of lands and resources:								
1. Lease and disposal of mineral resources	$618,000		$618,000		$618,000	$750,000	+$132,000	+$132,000
2. Land use and disposal	1,212,000		1,212,000		1,212,000	1,911,000	+699,000	+699,000
3. Management of grazing lands	1,580,000		1,580,000	$2,500	1,577,500	1,610,000	+30,000	+32,500
4. Forestry	2,405,000		2,405,000	1,400	2,403,600	2,750,000	+345,000	+346,400
5. Cadastral survey	963,000		963,000	900	962,100	1,000,000	+37,000	+37,900
6. Soil and moisture conservation	1,454,000		1,454,000	3,300	1,450,700	2,000,000	+546,000	+549,300
7. Squaw Butte Experiment Station	38,000		38,000		38,000	45,000	+7,000	+7,000
8. Fire suppression	150,000		150,000		150,000	250,000	+100,000	+100,000
9. Maintenance of physical facilities	25,000		25,000		25,000	25,000		
10. Weed control	1,345,000		1,345,000	1,000	1,344,000	1,344,000	−1,000	
11. General administration	1,210,000		1,210,000	500	1,209,500	1,300,000	+90,000	+90,500
Total, management of lands and resources	11,000,000		11,000,000	9,600	10,990,400	12,985,000	+1,985,000	+1,994,600
Construction:								
1. Access roads	2,750,000		2,750,000	2,680,000	70,000	2,000,000	−750,000	+1,930,000
2. Buildings in Alaska						100,000	+100,000	+100,000
Total, construction	2,750,000		2,750,000	2,680,000	70,000	2,100,000	−650,000	+2,030,000
Total, Bureau of Land Management	13,750,000		13,750,000	2,689,600	11,060,400	15,085,000	+1,335,000	+4,024,600
BUREAU OF INDIAN AFFAIRS								
Health, education and welfare services:								
1. Hospitals, disease preventive and curative services	21,444,765		21,444,765	564,528	20,880,237	22,499,080	+1,054,315	+1,618,843
2. Educational assistance, facilities, and services	26,010,660		26,010,660	122,885	25,887,775	26,875,000	+864,340	+987,225
3. Welfare and guidance services	3,412,315		3,412,315	300,000	3,112,315	3,599,180	+186,865	+486,865
4. Placement services	579,600		579,600		579,600	4,250,000	+3,670,400	+3,670,400
5. Maintaining law and order	353,660		353,660		353,660	353,660		
Total, health, education and welfare services	51,801,000		51,801,000	987,413	50,813,587	57,576,920	+5,775,920	+6,763,333
Resources management:								
1. Forest and range lands	2,176,119		2,176,119		2,176,119	2,550,000	+373,881	+373,881
2. Fire suppression	140,000		140,000		140,000	140,000		

3. Agricultural and industrial assistance	1,838,982		1,838,982		1,838,982	2,119,080	+280,098	+280,098
4. Soil and moisture conservation	2,421,672		2,421,672		2,421,672	3,200,000	+778,328	+778,328
5. Operation, repair, and maintenance of Indian irrigation systems	854,000		854,000		854,000	854,000		
6. Repair and maintenance of roads and trails	2,270,000		2,270,000		2,270,000	2,646,000	+376,000	+376,000
7. Development of Indian arts and crafts	44,513		44,513		44,513	45,000	+487	+487
8. Management of Indian trust property	1,346,100		1,346,100		1,346,100	2,000,000	+653,900	+653,900
9. Repair and maintenance of buildings and utilities	1,862,374		1,862,374		1,862,374	2,650,000	+787,626	+787,626
10. Weed control	300,000		300,000		300,000	300,000		
Total, resources management	13,253,760		13,253,760		13,253,760	16,504,080	+3,250,320	+3,250,320
Construction:								
1. Buildings and utilities	6,934,000		6,934,000	6,934,000		12,428,000	+5,494,000	+12,428,000
2. Roads and trails	4,246,000		4,246,000	4,246,000		4,500,000	+254,000	+4,500,000
3. Irrigation systems	4,940,000		4,940,000	4,940,000		3,941,000	−999,000	+3,941,000
4. Land acquisition								
Total, construction	16,120,000		16,120,000	16,120,000		20,869,000	+4,749,000	+20,869,000
Construction (liquidation of contract authorization)	1,380,000		1,380,000	1,380,000			−1,380,000	
General administrative expenses:								
1. Departmental office	800,000		800,000		800,000	860,000	+60,000	+60,000
2. Field offices	2,725,647		2,725,647		2,725,647	3,540,000	+814,353	+814,353
Total, general administrative expenses	3,525,647		3,525,647		3,525,647	4,400,000	+874,353	+874,353
Revolving fund for loans:								
1. Loans to corporations and tribes	1,000,000		1,000,000		1,000,000	1,000,000		
Total, Bureau of Indian Affairs	87,080,407		87,080,407	18,487,413	68,592,994	100,350,000	+13,269,593	+31,757,006
BUREAU OF RECLAMATION								
General investigations:								
1. Engineering and economic investigations	3,394,666		3,394,666	3,394,666		3,785,000	+390,334	+3,785,000
2. Advance planning	325,834		325,834	325,834		2,100,000	+1,774,166	+2,100,000
3. Investigations of existing projects	29,500		29,500	29,500		35,000	+5,500	+35,000
4. Alaskan investigations	250,000		250,000	250,000		330,000	+80,000	+330,000
Total, general investigations	4,000,000		4,000,000	4,000,000		6,250,000	+2,250,000	+6,250,000
Construction and rehabilitation:								
1. Eklutna project, Alaska	13,000,000		13,000,000	13,000,000		12,791,000	−209,000	+12,791,000
2. Gila project, Arizona	5,582,000		5,582,000	5,582,000		4,500,000	−1,082,000	+4,500,000
3. All-American Canal, Boulder Canyon project, California	1,221,229		1,221,229	1,221,229			−1,221,229	
5. Colorado River front work and levee system, Arizona-California-Nevada	687,948		687,948	687,948		1,905,000	+1,217,052	+1,905,000
6. Boulder Canyon project, Hoover Dam and powerplant, Arizona-Nevada	554,330		554,330	554,330		373,000	+373,000	+373,000
7. Davis Dam project, Arizona-Nevada						3,822,000	+3,267,670	+3,822,000

Summary of 1953 appropriations compared with 1954 estimates by activities—Continued

	Appropriation, 1953	Adjustments	Adjusted appropriation	Decreases	Base, 1954	Estimate, 1954	Increase (+) or decrease (−), estimate compared with adjusted appropriation	Increase (+) or decrease (−), estimate compared with base, 1954
BUREAU OF RECLAMATION—continued								
Construction and rehabilitation—Continued								
8. Cachuma project, California	$4,650,000		$4,650,000	$4,650,000		$6,510,000	+$1,860,000	+$6,510,000
9. Central Valley project, California	32,327,642		32,327,642	32,327,642		19,250,000	−13,077,642	+19,250,000
10. Kern River project, California						10,000	+10,000	+10,000
11. Kings River project, California						2,000	+2,000	+2,000
12. Solano project, California	3,000,000		3,000,000	3,000,000			−3,000,000	
13. Colorado-Big Thompson project, Colorado	18,000,000		18,000,000	18,000,000		5,750,000	−12,250,000	+5,750,000
14. Paonia project, Colorado						7,000	+7,000	+7,000
21. Minidoka project, American Falls power division, Idaho						853,000	+853,000	+853,000
23. Minidoka project, north side pumping division, Idaho	150,000		150,000	150,000		1,627,000	+1,477,000	+1,627,000
24. Palisades project, Idaho-Wyoming	9,900,000		9,900,000	9,900,000		17,650,000	+7,750,000	+17,650,000
27. Fort Peck project, Montana-North Dakota						350,000	+350,000	+350,000
28. Hungry Horse project, Montana	12,570,000		12,570,000	12,570,000		673,000	−11,897,000	+673,000
33. Middle Rio Grande project, New Mexico	1,538,000		1,538,000	1,538,000			−1,538,000	
35. Vermejo project, New Mexico						1,472,000	+1,472,000	+1,472,000
36. Rio Grande project, New Mexico-Texas	80,819		80,819	80,819		529,000	+448,181	+529,000
37. W. C. Austin project, Oklahoma	30,000		30,000	30,000			−30,000	
40. Grant's Pass project, Savage Rapids Dam, Oreg	700,000		700,000	700,000			−700,000	
42. Klamath project, California-Oregon	237,000		237,000	237,000		335,000	+98,000	+335,000
45. Provo River project, Utah	2,270,000		2,270,000	2,270,000		380,000	−1,890,000	+380,000
46. Weber Basin project, Utah	1,350,000		1,350,000	1,350,000		6,776,000	+5,426,000	+6,776,000
47. Columbia Basin project, Washington	19,680,000		19,680,000	19,680,000		21,930,000	+2,250,000	+21,930,000
48. Yakima project, Kennewick division, Washington	1,500,000		1,500,000	1,500,000		4,000,000	+2,500,000	+4,000,000
49. Yakima project, Roza division, Washington						881,000	+881,000	+881,000
50. Eden project, Wyoming	486,000		486,000	486,000		1,141,000	+655,000	+1,141,000
51. Kendrick project, first unit, Wyoming	3,750,000		3,750,000	3,750,000		2,970,000	−780,000	+2,970,000
52. Riverton project, Wyoming	233,307		233,307	233,307		475,000	+241,693	+475,000
55. Rehabilitation and betterment of existing projects	1,779,974		1,779,974	1,779,974		2,500,000	+720,026	+2,500,000
56. Drainage and minor completion program	561,038		561,038	561,038		1,110,000	+548,962	+1,110,000
54. Missouri River Basin project:								
Phase A:								
Angosta unit, South Dakota	1,108,000		1,108,000	1,108,000			−1,108,000	
Bostwick division, Nebraska-Kansas	2,364,094		2,364,094	2,364,094		4,500,000	+2,135,906	+4,500,000
Canyon Ferry unit, Montana	4,754,000		4,754,000	4,754,000		957,000	−3,797,000	+957,000
Cedar Bluff unit, Kansas						30,000	+30,000	+30,000

Crow Creek unit, Montana	400,000		400,000	400,000		673,000	+273,000	+673,000
Frenchman, Cambridge division, Nebraska	1,143,000		1,143,000	1,143,000		4,875,000	+3,732,000	+4,875,000
Fort Clark unit, North Dakota	57,000		57,000	57,000			−57,000	
Jamestown unit, North Dakota	1,880,000		1,880,000	1,880,000		1,657,000	−223,000	+1,657,000
Kirwin unit, Kansas	4,159,906		4,159,906	4,159,906		8,359,000	+4,199,094	+8,359,000
Lower Marias unit, Montana	2,500,000		2,500,000	2,500,000		7,461,000	+4,961,000	+7,461,000
Missouri division unit, Montana–North Dakota	2,000,000		2,000,000	2,000,000		5,263,000	+3,263,000	+5,263,000
Rapid Valley unit, South Dakota	1,000,000		1,000,000	1,000,000		4,230,000	+3,230,000	+4,230,000
Savage unit, Montana	2,000		2,000	2,000			−2,000	
Shadehill unit, South Dakota						20,000	+20,000	+20,000
St. Francis unit, Colorado-Kansas						35,000	+35,000	+35,000
Transmission division	11,693,378		11,693,378	11,693,378		19,765,000	+8,071,622	+19,765,000
Webster unit, Kansas	1,500,000		1,500,000	1,500,000		6,080,000	+4,580,000	+6,080,000
Drainage and minor completion program						161,000	+161,000	+161,000
Subtotal, phase A	34,561,378		34,561,378	34,561,378		64,066,000	+29,504,622	+64,066,000
Phase B	1,397,326		1,397,326	1,397,326		2,500,000	+1,102,674	+2,500,000
Phases C and D						2,000,000	+2,000,000	+2,000,000
Phase E	1,000,000	−$962,582	37,418	37,418			−37,418	
Other departmental agencies	5,000,000		5,000,000	5,000,000		4,750,000	−250,000	+4,750,000
Total, Missouri River Basin project	41,958,704	−962,582	40,996,122	40,996,122		73,316,000	+32,319,878	+73,316,000
Total, construction and rehabilitation	177,797,991	−962,582	176,835,409	176,835,409		193,888,000	+17,052,591	+193,888,000
Operation and maintenance:								
1. Imperial Dam project, Arizona-California	60,000		60,000		$60,000	60,000		
2. Yuma project, Arizona-California	226,900		226,900		226,900	201,000	−25,900	−25,900
3. Boulder Canyon project, Arizona-California-Nevada	1,553,000		1,553,000		1,553,000	1,654,710	+101,710	+101,710
4. Boulder City, Nev	590,000		590,000		590,000	525,000	−65,000	−65,000
5. Colorado River—front work and levee system, Arizona-California-Nevada	1,083,450		1,083,450		1,083,450	1,425,000	+341,550	+341,550
6. Parker Davis project, Arizona-California-Nevada	2,268,000		2,268,000		2,268,000	2,254,400	−13,600	−13,600
7. Central Valley project, California	3,349,750		3,349,750		3,349,750	4,608,413	+1,258,663	+1,258,663
10. Klamath project, California-Oregon	334,600		334,600		334,600	334,600		
11. Colorado-Big Thompson project, Colorado	1,288,450	−843,250	445,200		445,200	775,410	+330,210	+330,210
14. San Luis Valley project, Colorado	9,300		9,300		9,300	12,000	+2,700	+2,700
15. Boise project, Idaho-Oregon	568,400		568,400		568,400	558,260	−10,140	−10,140
17. Minidoka project, Idaho-Wyoming	362,000		362,000		362,000	361,000	−1,000	−1,000
18. Hungry Horse project, Montana	195,100		195,100		195,100	342,940	+147,840	+147,840
19. Milk River project, Montana						1,000	+1,000	+1,000
22. North Platte project, Nebraska-Wyoming	221,400		221,400		221,400	220,200	−1,200	−1,200
23. Carlsbad project, New Mexico						3,000	+3,000	+3,000
24. Middle Rio Grande project, New Mexico						108,000	+108,000	+108,000
25. Rio Grande project, New Mexico-Texas	1,197,300		1,197,300		1,197,300	1,197,594	+294	+294
26. W. C. Austin project, Oklahoma						2,060	+2,060	+2,060
27. Deschutes project, north unit, Oregon	193,000		193,000		193,000	201,500	+8,500	+8,500
35. Columbia Basin project, Washington	3,109,000		3,109,000		3,109,000	3,682,900	+573,900	+573,900
36. Yakima project, Washington	525,000		525,000		525,000	550,000	+25,000	+25,000
38. Kendrick project, Wyoming	525,700	−395,700	130,000		130,000	118,670	−11,330	−11,330
39. Riverton project, Wyoming	217,350	−45,750	171,600		171,600	127,400	−44,200	−44,200
40. Shoshone project, Wyoming-Montana	289,200	−100,800	188,400		188,400	183,200	−5,200	−5,200
41. Soil and moisture conservation operations	833,100		833,100		833,100	920,000	+86,900	+86,900

Summary of 1953 appropriations compared with 1954 estimates by activities—Continued

	Appropriation, 1953	Adjustments	Adjusted appropriation	Decreases	Base, 1954	Estimate, 1954	Increase (+) or decrease (−), estimate compared with adjusted appropriation	Increase (+) or decrease (−), estimate compared with base, 1954
BUREAU OF RECLAMATION—continued								
Operation and maintenance—Continued								
42. Missouri River Basin and transmission facilities operated for other projects		+$2,348,082	$2,348,082		$2,348,082	$3,571,743	+$1,223,661	+$1,223,661
43. Cooperative program with Department of Agriculture						800,000	+800,000	+800,000
Total, operation and maintenance	$19,000,000	+962,582	19,962,582		19,962,582	24,800,000	+4,837,418	+4,837,418
General administrative expenses:								
Departmental and Denver offices	2,716,600		2,716,600		2,716,600	2,716,600		
Regional offices	2,533,400		2,533,400		2,533,400	2,533,400		
Total, general administrative expenses	5,250,000		5,250,000		5,250,000	5,250,000		
Emergency fund	400,000		400,000	$400,000		1,000,000	+600,000	+1,000,000
Total, Bureau of Reclamation	206,447,991		206,447,991	181,235,400	25,212,582	231,188,000	+24,740,009	+205,975,418
GEOLOGICAL SURVEY								
Surveys, investigations, and research:								
1. Topographic surveys and mapping	11,306,585		11,306,585	45,000	11,261,585	14,950,000	+3,643,415	+3,688,415
2. Geologic and mineral-resource surveys and mapping	5,810,000		5,810,000	5,000	5,805,000	6,750,000	+940,000	+945,000
3. Water-resources investigations	6,187,000		6,187,000	40,000	6,147,000	6,960,000	+773,000	+813,000
4. Soil and moisture conservation	43,700		43,700		43,700	100,000	+56,300	+56,300
5. Classification of lands	360,000		360,000		360,000	410,000	+50,000	+50,000
6. Supervision of mining and oil and gas leases	1,080,000		1,080,000		1,080,000	1,200,000	+120,000	+120,000
7. General administration	575,400		575,400		575,400	700,000	+124,600	+124,600
Total, Geological Survey	25,362,685		25,362,685	90,000	25,272,685	31,070,000	+5,707,315	+5,797,315
BUREAU OF MINES								
Conservation and development of mineral resources:								
1. Fuels:								
(a) Coal	2,109,628		2,109,628	67,070	2,042,558	2,472,558	+362,930	+430,000
(b) Petroleum and natural gas	1,343,356		1,343,356		1,343,356	1,518,356	+175,000	+175,000

(c) Synthetic liquid fuels	7,630,304		7,630,304		7,630,304	7,905,304	+275,000	+275,000
(d) Helium	90,795		90,795		90,795	90,795		
2. Minerals and metals:								
(a) Ferrous metals and alloys	1,793,719		1,793,719		1,793,719	2,366,446	+572,727	+572,727
(b) Nonferrous metals	3,585,125		3,585,125		3,585,125	3,805,675	+220,550	+220,550
(c) Nonmetallic minerals	833,294		833,294		833,294	1,019,799	+186,505	+186,505
(d) Mineral research, unclassified	915,854		915,854	56,712	859,142	966,142	+50,288	+107,000
3. Control of fires in inactive coal deposits	354,925		354,925		354,925	354,925		
Total, conservation and development of mineral resources	18,657,000		18,657,000	123,782	18,533,218	20,500,000	+1,843,000	+1,966,782
Health and safety:								
1. Investigation of accidents and rescue work	849,370		849,370		849,370	850,000	+630	+630
2. Mine inspections and investigations	2,721,440		2,721,440		2,721,440	4,125,000	+1,403,560	+1,403,560
3. Explosives and explosions testing and research	509,190		509,190		509,190	555,000	+45,810	+45,810
Total, health and safety	4,080,000		4,080,000		4,080,000	5,530,000	+1,450,000	+1,450,000
Construction:								
1. New laboratory facilities	750,000		750,000	750,000		1,560,000	+810,000	+1,560,000
2. Synthetic liquid fuels	250,000		250,000	50,000	200,000	200,000	−50,000	
Total, construction	1,000,000		1,000,000	800,000	200,000	1,760,000	+760,000	+1,560,000
Construction (liquidation of contract authorization)	2,600,000		2,600,000	2,600,000			−2,600,000	
General administrative expenses	1,278,000		1,278,000		1,278,000	1,325,000	+47,000	+47,000
Total, Bureau of Mines	27,615,000		27,615,000	3,523,782	24,091,218	29,115,000	+1,500,000	+5,023,782
NATIONAL PARK SERVICE								
Management and protection:								
1. Management of park and other areas	6,922,820		6,922,820	4,500	6,918,320	8,000,000	+1,077,180	+1,081,680
2. Forestry and fire control	654,000	−600	653,400		653,400	690,000	+36,600	+36,600
3. Soil and moisture conservation	91,200		91,200		91,200	100,000	+8,800	+8,800
4. Park and recreation programs	849,800	−1,438	848,362		848,362	920,000	+71,638	+71,638
5. Concessions management	273,180	−2,412	270,768		270,768	290,000	+19,232	+19,232
Total, management and protection	8,791,000	−4,450	8,786,550	4,500	8,782,050	10,000,000	+1,213,450	+1,217,950
Maintenance and rehabilitation of physical facilities:								
1. Roads and trails	4,139,000	−505	4,138,495		4,138,495	4,600,000	+461,505	+461,505
2. Buildings, utilities and other facilities	3,865,000	−125	3,864,875		3,864,875	4,600,000	+735,125	+735,125
Total, maintenance and rehabilitation of physical facilities	8,004,000	−630	8,003,370		8,003,370	9,200,000	+1,196,630	+1,196,630
Construction:								
1. Parkways	8,105,000	−300	8,104,700	8,104,700		4,269,000	−3,835,700	+4,269,000
2. Roads and trails	4,675,000	−260	4,674,740	4,674,740		4,510,000	−164,740	+4,510,000
3. Buildings, utilities and other facilities	1,912,500	−990	1,911,510	1,911,510		5,550,000	+3,638,490	+5,550,000

Summary of 1953 appropriations compared with 1954 estimates by activities—Continued

	Appropriation, 1953	Adjustments	Adjusted appropriation	Decreases	Base, 1954	Estimate, 1954	Increase (+) or decrease (−), estimate compared with adjusted appropriation	Increase (+) or decrease (−), estimate compared with base, 1954
NATIONAL PARK SERVICE—continued								
Construction—Continued								
4. Acquisition of lands and water rights:								
(a) Lands	$325,000	−$500	$324,500	$324,500		$3,565,000	+$3,240,500	+$3,565,000
(b) Water rights	15,000	−40	14,960	14,960		25,000	+10,040	+25,000
Total construction	15,032,500	−2,090	15,030,410	15,030,410		17,919,000	+2,888,590	+17,919,000
Construction (liquidation of contract authority)						1,500,000	+1,500,000	+1,500,000
General administrative expenses:								
1. Departmental expenses	778,765		778,765		$778,765	796,765	+18,000	+18,000
2. Regional office expenses	563,235		563,235		563,235	603,235	+40,000	+40,000
Total, general administrative expenses	1,342,000		1,342,000		1,342,000	1,400,000	+58,000	+58,000
Total, National Park Service	33,169,500	−7,170	33,162,330	15,034,910	18,127,420	40,019,000	+6,856,670	+21,891,580
FISH AND WILDLIFE SERVICE								
Management of resources:								
1. Administration of fish and game laws	1,727,876		1,727,876	75,000	1,652,876	1,727,876		+75,000
2. Propagation and distribution of food fishes	2,427,058		2,427,058		2,427,058	2,757,058	+330,000	+330,000
3. Mammal and bird reservations	1,843,872		1,843,872		1,843,872	1,958,872	+115,000	+115,000
4. River basin studies	279,250		279,250		279,250	342,250	+63,000	+63,000
5. Control of predatory animals and injurious rodents	949,236		949,236		949,236	964,236	+15,000	+15,000
6. Soil and moisture conservation	98,083		98,083		98,083	124,708	+26,625	+26,625
Total, management of resources	7,325,375		7,325,375	75,000	7,250,375	7,875,000	+549,625	+624,625
Investigations of resources:								
1. Research on fish and fisheries	2,712,618	−840	2,711,778	297,000	2,414,778	2,501,778	−210,000	+87,000
2. Exploration, development and utilization of fishery resources	1,109,284	−1,092	1,108,192		1,108,192	1,166,229	+58,037	+58,037
3. Research on birds and mammals	480,098	−620	479,478		479,478	511,993	+32,515	+32,515
Total, investigations of resources	4,302,000	−2,552	4,299,448	297,000	4,002,448	4,180,000	−119,448	+177,552

Construction:								
1. Fish facilities	378,000		378,000	378,000		275,000	−103,000	+275,000
2. Wildlife facilities	295,800		295,800	295,800		30,000	−265,800	+30,000
Total, construction	673,800		673,800	673,800		305,000	−368,800	+305,000
General administrative expenses:								
1. Departmental expenses	444,261	−1,196	443,065		443,065	443,065		
2. Regional office expenses	459,739	−4,606	455,133		455,133	481,935	+26,802	+26,802
Total, general administrative expenses	904,000	−5,802	898,198		898,198	925,000	+26,802	+26,802
Total, Fish and Wildlife Service	13,205,175	−8,354	13,196,821	1,045,800	12,151,021	13,285,000	+88,179	+1,133,979
OFFICE OF TERRITORIES								
Administration of Territories:								
1. Territory of Alaska:								
(a) Governor's office	112,760		112,760	15,000	97,760	102,000	−10,760	+4,240
(b) Legislative expenses	48,000		48,000	48,000			−48,000	
(c) Care and custody of Alaskan insane	559,600		559,600		559,600	559,600		
2. Territory of Hawaii:								
(a) Governor's office	42,216		42,216	16	42,200	42,200	−16	
(b) Legislative expense	46,700		46,700	46,700			−46,700	
3. Virgin Islands:								
(a) Governor's office	313,250		313,250		313,250	372,000	+58,750	+58,750
(b) Grants to municipalities	745,000		745,000		745,000	745,000		
4. Guam:								
(a) Governor's office	63,700		63,700	9,564	54,136	58,500	−5,200	+4,364
(b) Legislative expenses	23,300		23,300		23,300	23,300		
(c) Administration of sec. 26 (c), Public Law 630, 81st Cong	150,000		150,000	150,000			−150,000	
5. American Samoa:								
(a) Governor's office	50,254		50,254		50,254	56,400	+6,146	+6,146
(b) Grants	1,290,000		1,290,000		1,290,000	1,534,000	+244,000	+244,000
(c) Legislative expenses	27,000		27,000		27,000	27,000		
(d) Chief justice and high court	33,675		33,675	1,235	32,440	32,600	−1,075	+160
6. Canton Island administration	17,000		17,000		17,000	17,200	+200	+200
7. General administration	304,082		304,082		304,082	340,200	+36,118	+36,118
8. Trust Territory:								
(a) High Commissioner's Office	58,904	−58,904						
(b) Judiciary	39,000	−39,000						
(c) Grants	5,395,846	−5,395,846						
Total, administration of territories	9,320,287	−5,493,750	3,826,537	270,515	3,556,022	3,910,000	+83,463	+353,978
Trust Territory of the Pacific Islands:								
1. High Commissioner's Office		58,904	58,904		58,904	59,000	+96	+96
2. Judiciary		39,000	39,000		39,000	56,000	+17,000	+17,000
3. Grants		5,125,846	5,125,846		5,125,846	8,385,000	+3,259,154	+3,259,154
Total, Trust Territory of the Pacific Islands		5,223,750	5,223,750		5,223,750	8,500,000	+3,276,250	+3,276,250

Summary of 1953 appropriations compared with 1954 estimates by activities—Continued

	Appropriation, 1953	Adjustments	Adjusted appropriation	Decreases	Base, 1954	Estimate, 1954	Increase (+) or decrease (−), estimate compared with adjusted appropriation	Increase (+) or decrease (−), estimate compared with base, 1954
OFFICE OF TERRITORIES—continued								
Alaska public works:								
1. Construction	$12,554,200		$12,554,200	$12,554,200		$13,725,000	+$1,170,800	+$13,725,000
2. Advance planning						600,000	+600,000	+600,000
3. Administration	654,000		654,000		$654,000	675,000	+21,000	+21,000
Total, Alaska public works	13,208,200		13,208,200	12,554,200	654,000	15,000,000	+1,791,800	+14,346,000
Construction of roads, Alaska:								
1. Preparation of plans	300,000		300,000	300,000		550,000	+250,000	+550,000
2. Construction in progress	13,790,000		13,790,000	13,790,000		15,650,000	+1,860,000	+15,650,000
3. Reconstruction	1,250,000		1,250,000	1,250,000		1,250,000		+1,250,000
4. New construction	1,660,000		1,660,000	1,660,000		950,000	−710,000	+950,000
Total, construction of roads, Alaska	17,000,000		17,000,000	17,000,000		18,400,000	+1,400,000	+18,400,000
Operation and maintenance of roads, Alaska:								
1. Major roads	1,734,120		1,734,120		1,734,120	2,044,130	+310,010	+310,010
2. Local and feeder roads	1,523,565		1,523,565	217,695	1,305,870	1,305,870	−217,695	
3. Shop facilities	60,315		60,315	10,315	50,000	50,000	−10,315	
Total, operation and maintenance of roads, Alaska	3,318,000		3,318,000	228,010	3,089,990	3,400,000	+82,000	+310,000
Virgin Islands public works:								
1. Construction of projects	999,680		999,680	999,680		1,000,000	+320	+1,000,000
2. Administration	100,310	−$320	100,000		100,000	100,000		
Total, Virgin Islands public works	1,100,000	−320	1,099,680	999,680	100,000	1,100,000	+320	+1,000,000
Virgin Islands public works (liquidation of contract authority)	1,467,000		1,467,000	1,467,000			−1,467,000	
Construction, Alaska Railroad:								
1. Construction	3,906,000		3,906,000	3,906,000		16,311,000	+12,405,000	+16,311,000
Total, Office of Territories	49,319,487	−270,320	49,049,167	36,425,405	12,623,762	66,621,000	+17,571,833	+53,997,238

ADMINISTRATION, DEPARTMENT OF THE INTERIOR								
Salaries and expenses:								
1. Departmental direction	271, 424		271, 424		271, 424	273, 924	+2, 500	+2, 500
2. Program direction and coordination	903, 250		903, 250		903, 250	972, 000	+68, 750	+68, 750
3. Administrative management services	928, 193		928, 193	1, 200	926, 993	978, 523	+50, 330	+51, 530
4. Legal services	325, 847		325, 847		325, 847	339, 267	+13, 420	+13, 420
5. General services	96, 286		96, 286		96, 286	96, 286		
Total, salaries and expenses	2, 525, 000		2, 525, 000	1, 200	2, 523, 800	2, 660, 000	+135, 000	+136, 200
VIRGIN ISLANDS CORPORATION								
Grants, Virgin Islands Corporation:								
1. Operating losses	111, 000		111, 000		111, 000	987, 925	+876, 925	+876, 925
2. Programs not predominantly of a revenue-producing character	130, 000		130, 000		130, 000	182, 075	+52, 075	+52, 075
Total, grants, Virgin Islands Corporation	241, 000		241, 000		241, 000	1, 170, 000	+929, 000	+929, 000
Revolving fund, Virgin Islands Corporation	1, 515, 000		1, 515 000	1. 515. 000		1. 375, 000	−140, 000	+1, 375, 000
Total, Virgin Islands Corporation	1, 756, 000		1, 756, 000	1, 515, 000	241, 000	2, 545, 000	+789, 000	+2, 304, 000
Grand total, Department of the Interior	542, 357, 345	−285, 844	542. 071, 501	332, 768, 710	209, 302, 782	607, 251, 400	+65, 179, 899	+397, 948, 618

OFFICE OF THE SECRETARY

FEBRUARY 24, 1953.

ENFORCEMENT OF CONNALLY HOT-OIL ACT

WITNESSES

HUGH A. STEWART, DIRECTOR, OIL AND GAS DIVISION
EDWARD B. SWANSON, ASSISTANT DIRECTOR, OIL AND GAS DIVISION

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$169,670	$187,000	$187,000
Reimbursements from non-Federal sources	395	400	800
Total available for obligation	170,065	187,400	187,800
Unobligated balance, estimated savings	−2,376		
Obligations incurred	167,689	187,400	187,800

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

	1952 actual	1953 estimate	1954 estimate
1. Enforcement of the Connally Hot-Oil Act	$167,294	$187,000	$187,000
2. Replacement of personal property sold	395	400	800
Obligations incurred	167,689	187,400	187,800

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	32	31	31
Full-time equivalent of all other positions		1	1
Average number of all employees	28	31	31
Average salaries and grades:			
General schedule grades:			
Average salary	$5,478	$5,521	$5,554
Average grade	GS–8.1	GS–8.2	GS–8.2
Crafts, protective, and custodial grades:			
Average salary	$2,325	$1,810	$1,810
Average grade	CPC–2.0	CPC–1.0	CPC–1.0
01 Personal services:			
Permanent positions	$148,580	$166,155	$166,645
Part-time and temporary positions		1,000	1,000
Regular pay in excess of 52-week base	645	645	655
Payment above basic rates		1,000	500
Total personal services	149,225	168,800	168,800
02 Travel	5,107	7,200	7,200
03 Transportation of things	161	300	300
04 Communication services	813	900	900
05 Rents and utility services	48	50	50
06 Printing and reproduction	1,795	1,850	1,850
07 Other contractual services	3,137	3,000	2,700
08 Supplies and materials	2,355	3,300	3,000
09 Equipment	5,048	2,000	3,000
Obligations incurred	167,689	187,400	187,800

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$16,970	$14,639	$17,639
Adjustment in obligations of prior years	1,437		
Obligations incurred during the year	167,689	187,400	187,800
	186,096	202,039	205,439
Deduct:			
Reimbursable obligations	395	400	800
Unliquidated obligations, end of year	14,639	17,639	17,639
Total expenditures	171,062	184,000	187,000
Expenditures are distributed as follows:			
Out of current authorizations	152,655	170,798	171,000
Out of prior authorizations	18,407	13,202	16,000

Mr. JENSEN. Mr. Stewart, you are the Director of the Oil and Gas Division of the Office of the Secretary, are you not?

Mr. Stewart. Yes, sir.

Mr. JENSEN. And Mr. E. B. Swanson is the Assistant Director?

Mr. STEWART. Yes, sir.

Mr. JENSEN. Mr. Stewart, you are asking for $187,000 for the enforcement of the Connally Hot-Oil Act for 1954, which is the same amount as you received in fiscal 1953?

Mr. STEWART. Yes sir.

NUMBER OF EMPLOYEES

Mr. JENSEN. Now, how many people do you have employed?

Mr. STEWART. We have 30 people, in the Oil Administration.

Mr. JENSEN. Are they permanent employees?

Mr. STEWART. Yes, sir. There has been very little turnover.

Now, in fiscal 1952, we had a reduction in the amount of money available for personnel, and the net effect of that was that we had to lay off 8 people, of whom 4 were examiners. In the restoration of funds which we got for fiscal 1953, we were able to recruit back some personnel, but in the overall the employees of the Administration, both here in Washington and in the Federal Petroleum Board, are very permanent, in the sense that they stay on the job year after year. Some of them have been there since the start of the work.

JUSTIFICATIONS FOR 1954 PROGRAM

Mr. JENSEN. Without objection, I wish to place in the record pages 2, 3, and 4 of the justifications, which explain in a brief manner the purpose of the Connally Hot-Oil Act and the justifications for the $187,000 for fiscal 1954.

(The justifications are as follows:)

Analysis by activities

Enforcement of the Connally Hot Oil Act:	
Appropriation, 1953	$187,000
Base, 1954	187,000
Estimate, 1954	187,000

The Connally Hot-Oil Act is permanent legislation which gives Federal support to the State oil and gas conservation laws by prohibiting the shipment in interstate commerce of oil produced in excess of the amounts permitted under the

State laws and regulations to conserve oil and gas. While oil and gas conservation is essential at all times, in order to prevent waste in oil and gas production, it is particularly important during an emergency or mobilization period.

The enforcement of the Connally Act is essentially a field activity, carried out by the Federal Petroleum Board, which has its principal office in Kilgore, Tex., with suboffices at Midland and Houston, Tex., and Lafayette, La. A small staff of field examiners, operating from these offices, carry on a continuous investigation in the oilfields of New Mexico, Texas, and Louisiana, and limited inspections in Alabama, Mississippi, and the other States to which the law applies.

During the 1952 fiscal year, the examiner staff visited 541 fields and gaged, checked, or otherwise inspected 8,777 leases, in the course of which 753 field interviews were conducted. These are somewhat lower totals than those reported for 1951, because of the reductions in field activities which resulted from the smaller appropriation available during the 1952 year. The field staff also received and processed each month about 6,400 reports per month from producers, transporters, and refiners. These reports covered operations in nearly 1,400 oilfields, which accounted for about 74 million barrels monthly of oil production, about 38 percent of the national total.

During the fiscal year 1952, 14 cases were disposed of, 1 by grand-jury no-bill, 3 by administrative action, and 10 by successful prosecution, which resulted in the imposition of fines totaling $38,930, compared with $33,000 in 1951 and $52,950 in 1950. At the close of the year, there were 13 cases pending.

The work of Connally Act enforcement has only recently recovered from the drastic actions which resulted from the reduction in funds available for fiscal 1952. We began that year with a staff of 31, about half as large as the customary prewar staff. During the year, we were compelled for lack of funds to cut the staff to 23, a reduction of 8, of whom half were field examiners. Since the beginning of fiscal 1953, with our funds restored to a minimum level for effective operation, we have been able to rebuild our staff to a total of 30, that total being reached in December. We do not plan any more additions during the current year and are not requesting any additions for fiscal 1954. The staff of 30, as now constituted, consists of 3 persons in the Washington office, 13 at Kilgore 6 at Midland, Tex.; and 4 each at Houston, Tex., and Lafayette, La. We regard this as the minimum number with which the Connally Act can be enforced.

Cooperation between the Board, the petroleum industry, and the officials of the State conservation agencies always has been of prime importance in achieving the purposes of the Connally Act and is being continued with mutually beneficial results.

The work which needs to be done under the Connally Act continuously is being enlarged, even apart from the increased importance resulting from the present emergency. New areas are being brought into production; more wells are being drilled; and more oil is being produced and shipped. The staff that administers the act is small, but it is experienced, efficient, and effective in its work. We urge that the present staff be continued, as the cases now in hand and under preparation involve important matters which should be and are being carried forward vigorously.

The estimate does provide for the replacement of two automobiles in 1954. The automobiles to be replaced are two 1949 Ford four-door passenger cars and both have been driven in excess of 60,000 miles.

Itemization of estimate

	Estimate 1953	Estimate 1954	Increase (+) or decrease (−)
FUNDS AVAILABLE FOR OBLIGATION			
Appropriation or estimate	$187,000	$187,000	
Reimbursements from non-Federal sources	400	800	+400
Obligations incurred	187,400	187,800	+400
OBLIGATIONS BY OBJECTS			
01 Personal services	168,800	168,800	
02 Travel	7,200	7,200	
03 Transportation of things	300	300	
04 Communication services	900	900	
05 Rents and utility services	50	50	
06 Printing and reproduction	1,850	1,850	
07 Other contractual services	3,000	2,700	−300
08 Supplies and materials	3,300	3,000	−300
09 Equipment	2,000	3,000	+1,000
Obligations incurred	187,400	187,800	+400

FEDERAL VERSUS STATE ENFORCEMENT

Mr. JENSEN. Mr. Stewart, why cannot the State conservation agencies do all the enforcement work that is necessary at this point, after the years of enforcement that the Federal Government has carried on?

Would it not be possible for the States to carry on this work since it has been developed to this point?

Mr. STEWART. It seems hardly likely that the States could do it and do it as effectively as is done under the Connally Hot-Oil Act.

The State administrations are doing all they can within their own spheres, but we find that there is a constant run of violations—some technical and some actually fraudulent—which the State authorities do not pick up, and if the petroleum produced in that violation crosses State lines, the State has lost any claim on it, and they apparently have an inability to control it as it should be controlled.

Now, one of the prime justifications for the act and for its enforcement—continuous enforcement—in my estimation, is the necessity for the Federal Government to positively and actively back up State conservation laws, rules, and regulations.

Now, under the conservation that we have had in the past 18 years, we had in the country developed a productive reserve for crude oil that is, and has been, since the beginning of World War II, a very comfortable backlog of available capacity, which could be drawn on at any time.

When we went into World War II, the productive capacity had been built up to approximately 1 million barrels, which at that time was 25 percent of the national requirements. True, during the war as a result of limited drilling, the productive capacity was drawn down, and we ended the war producing every field in the country right to capacity, and probably some of them were being procured in excess of their reasonable capacity and we probably were doing some damage to one or another of the fields.

With the end of the war and the resumption of drilling, by reason of having more manpower and more material available, the industry was able to build back up a reserve capacity and today again we have approximately 1 million barrels of reserve producing capacity, and that is our principal protection against a sudden emergency or a war attack.

If we did not have the backing the Federal Government gives the conservation efforts in the States, I am very much afraid that the State activities and the State enforcement would probably break down, just as they had broken down at the time the act was considered necessary and passed by the Congress.

I think, for those reasons, it is highly important that it be maintained, and maintained at the present level.

Now, the staff which we have in the field is admittedly small. There are a number of people who will not hesitate to break a State law if they think they can get away with it, but who are a little bit loath to violate the Federal law.

By continuous inspections carried on by this crew of examiners, we can go a long way toward keeping widespread violations from occurring.

SUMMARY OF ENFORCEMENT ACTIVITIES

Mr. JENSEN. Will you supply for the record, a table, comparing your reports processed and inspections accomplished during 1950, 1951, 1952, and 1953 fiscal years?

(The table referred to follows:)

Summary of enforcement activities, Federal Petroleum Board

	Fiscal 1950	Fiscal 1951	Fiscal 1952	Fiscal 1953 to date
Number of fields visited	533	545	541	317
Number of leases visited, inspected, checked, or gaged	7,667	9,344	8,777	4,479
Number of field interviews	1,656	1,362	753	567
Total fines paid	$52,950	$33,000	$38,930	$34,450
Number of cases involved	10	7	10	5

VIOLATIONS AND FINES IMPOSED

Mr. JENSEN. How many fines were imposed and what was the amount of the fines that were imposed in fiscal 1952 and fiscal 1953 to date?

Mr. SWANSON. In fiscal 1952 there were 10 cases which were completed in the courts, as to which fines were imposed and paid, totaling $38,930.

So far in fiscal 1953, there have been 5 cases concluded and fines imposed of $34,450.

Mr. JENSEN. How many cases do you have pending?

Mr. SWANSON. We have 13 cases pending, 6 of which are in the hands of the United States attorney, or in the Department of Justice and 7 are in the investigative stage.

Mr. JENSEN. How many people were brought to the bar of justice and accused of violating this act in fiscal 1952?

Mr. SWANSON. I could not give you that here, because the cases vary as to the number of persons involved.

Mr. JENSEN. Then how many cases have been tried in fiscal 1952?

Mr. SWANSON. There was only one case as to which there was a "No bill" before the grand jury, so that the number that would be tried would be the 10, which were concluded, plus the 1.

Mr. JENSEN. You prosecuted successfully 10 cases out of 11 in fiscal 1952?

Mr. SWANSON. Yes, sir.

Mr. JENSEN. And what is the situation so far in fiscal 1953?

Mr. SWANSON. Five cases have been prosecuted successfully and none unsuccessfully.

I have also a tabulation here which compares the 5 years ending with fiscal 1952 with the 5 years ending fiscal 1942—the 5 years before the war and the 5 most recent years. I thought that might be of interest. There were 26 cases prosecuted successfully in the 5 prewar years, as against 39 in the last 5 fiscal years, a 50-percent increase in the number of cases prosecuted. This was done with a staff of investigators about half as large. The fines were roughly the same, although slightly larger in the prewar years; $247,000 in the 5 prewar years, as against $223,000 in the 5 years ending in fiscal 1952.

There is one thing more: In the history of the act and since its enactment, the total fines paid have amounted to $765,000.

Mr. JENSEN. And the amount of money which has been expended for this purpose has been how much?

Mr. SWANSON. All the 18 years of its life?

Mr. JENSEN. Yes.

Mr. SWANSON. Somewhere around $3 million.

Mr. JENSEN. $3 million?

Mr. SWANSON. Yes, sir, between $3 and $4 million.

INCREASED EFFICIENCY

Mr. JENSEN. Did I hear you say that with a staff half as large as in the previous 5-year period that you had successfully prosecuted 50 percent more cases?

Mr. SWANSON. Yes, sir; that is correct.

Mr. JENSEN. With half the force?

Mr. SWANSON. That is correct, sir.

Mr. JENSEN. Well, then, if we cut the force down to 50 percent now, would that bring the same results as previously?

Mr. SWANSON. I would like to say, if it may not be regarded as facetious, that I might suspect that you and Mr. Beasley have gotten together on that question. He has pointed that out to me, when I have been attempting to pay due respect to the efficiency and faithfulness of the work of the staff. He has pointed out to me that a further reduction might result in further efficiency.

Mr. JENSEN. I could not help but notice that. How do you account for this increase in efficiency with a decrease in staff?

Mr. SWANSON. It is accounted for in two ways. One, the elimination of some positions in the field which were not effective and productive. We have reduced the number of members of the Board and some of the clerical force. Also, the number of examiners has been reduced, and those which are employed, are working more effectively than the staff which we had prior to the war. It is a matter of field administration, I would say.

DOMESTIC AND FOREIGN PRODUCTION OF OILS AND GASSES

Mr. FENTON. What is the situation in regard to the production of oil and gas today?

Mr. STEWART. We are now producing approximately 6½ million barrels of oil a day, plus about 600,000 barrels a day of natural gas liquids—the propane and butane and other liquids—that are recovered from natural gas. We have a reserve productive capacity in the field of approximately 1 million barrels.

We asked the National Petroleum Council in December to make a study of the country and give us their current estimate as of January 1. Our own study indicates a productive capacity of approximately 7,200,000 barrels of oil.

Mr. FENTON. Per day?

Mr. STEWART. Yes, sir. The Council will make a much more detailed study than we can, but it appears that we will have at least that much, and maybe a little more. Now, that is adequate to take care of our normal peacetime demands, plus the defense mobilization demands. It is a bare minimum, however, to carry the impact of an allout war.

Mr. FENTON. But it does include the Korean war?

Mr. STEWART. It includes all of the military requirements as we have experienced them since the onset of Korea.

Mr. FENTON. That is an estimate so far as domestic production is concerned. What about our foreign production?

Mr. STEWART. The United States controlled foreign production? Well, I cannot quote you that figure as to the amount of companies in foreign activities, because I do not try to carry the individual figures in mind.

In the overall there is approximately 1,800,000 barrels now in production in Venezuela and in the neighborhood of 200,000 barrels of other production in North and South America. In Canada there is production a little in excess of 200,000 barrels, and with more pipeline outlets, that will rise from 250,000 to upward of maybe 300,000 a day. So, in the Western Hemisphere in the overall, we have a potential that will run between 9,500,000 and 10 million barrels a day.

Mr. SWANSON. I think world production runs about 12 million barrels a day including the Soviet Union and the satellite countries. The United States produces about 55 percent of the world oil now.

(Discussion off the record.)

Mr. JENSEN. Back on the record.

GAS RESERVES IN THE UNITED STATES

Mr. FENTON. What is the amount of gas transmitted to the eastern section of the United States by way of the pipelines which we have? We in the coal fields of Pennsylvania are certainly vitally interested in that phase of it.

Mr. SWANSON. The former Big Inch and Little Big Inch pipelines now transport about 700 million cubic feet of natural gas daily.

Mr. FENTON. We are very, very vitally interested in this problem. How much gas reserve have we got in the United States?

Mr. SWANSON. 194 trillion cubic feet as of the beginning of 1952.

Mr. FENTON. What is the consumption daily?

Mr. SWANSON. In the utility consumption, that is, the gas which moves by public utility pipeline to commercial and domestic and industrial consumers, the consumption is in the neighborhood of 6 trillion cubic feet a year.

Mr. FENTON. Six trillion a year?

Mr. SWANSON. Yes, sir; something in the order of a 35- or 40-year relationship between the proven reserves and the consumption.

If it is agreeable with the committee, there was a chart prepared and submitted to the House Interstate and Foreign Commerce Committee last week that gave those figures and we can insert those figures in the record.

Mr. FENTON. Mr. Chairman, I believe the table should be inserted in the record.

Mr. JENSON. All right. Without objection, it is so ordered.

(The matter referred to follows:)

Estimate of proved reserves and annual net production of natural gas in trillions of cubic feet

	Proved reserves	Annual net production		Proved reserves	Annual net production
1940	85,000	3,331	1946	160,600	5,152
1941	113,800	3,459	1947	165,900	5,650
1942	110,000	3,701	1948	173,900	5,958
1943	110,000	4,336	1949	180,400	6,274
1944	133,500	4,731	1950	185,600	7,083
1945	147,800	4,840	1951	193,800	8,250

Disposition of net production

	1940		1951	
	Million cubic feet	Percent	Million cubic feet	Percent
Used in transportation and losses	735,911	22.1	1,204,734	14.6
Underground storage	14,995	0.5	138,262	1.7
Industrial use	2,001,988	60.1	4,968,515	60.2
Commercial	443,646	13.3	1,474,725	17.9
Residential	134,644	4.0	464,309	5.6
Total	3,331,184	100.0	8,250,545	100.0

Mr. FENTON. So, you think we have a reserve with a normal consumption for a minimum of 40 years?

Mr. SWANSON. Thirty-five to forty years.

CONDITION IN THE OIL INDUSTRY BEFORE THE ACT

Mr. KIRWAN. Mr. Swanson, in regard to the production of oil before the Connally Hot-Oil Act, you said in your opinion and in your opening statement that there was a kind of a chaos in a number of areas.

Mr. SWANSON. That is correct. The production of oil in the east Texas field in the middle of 1931 and the middle of 1933 ran up around 1 million barrels a day and the country as a whole in 1935 produced around 2,800,000 barrels a day, which was, I would say, roughly 40 percent of what the country produces today.

Mr. KIRWAN. Forty percent of what they are producing now?

Mr. SWANSON. Yes, sir.

Mr. KIRWAN. You do know the amount of gas they were producing or using in 1931?

Mr. SWANSON. No, sir; I do not know that.

Mr. KIRWAN. Try to find those figures, because there has been conversion from the burning of coal to the use of gas for domestic purposes in homes. Try to find out how much of that is being used in industry and homes and what they are using today.

(The matter referred to follows:)

Trillions of B. t. u.'s supplied United States

	Natural gas	Coal
1932	1,673	9,380
1951	7,955	15,071
Percent increase, 1951 over 1932	380	61

Source: Gas Facts, 1951, p. 30, table 13.

Total natural gas utility sales, by classes of service (excludes field sales and sales for resale)

Year	Total	Residential	Commercial	Industrial	Other
1932	8,190.0	2,945.3	878.4	4,338.8	27.5
Percent	100.0	36.1	10.7	53.0	0.2
1951	44,718.3	14,008.7	3,985.9	24,838.5	1,885.2
Percent	100.0	31.3	8.9	55.6	4.2
Percent increase, 1951 over 1932	446.0	375.6	353.8	472.5	

Source: Gas Facts, 1951, p. 109, table 73.

Gas customers (thousands)

Year	Total	Natural	Manufactured	LPG and mixed
1932	15,532	5,499	8,476	1,557
1951	24,953	16,037	5,804	3,112
Percent increase, 1951 over 1932	60	192	−68	100

Approximate number residential customers using gas for heating

1940	3,850,000
1952	11,120,000
Percent increase; 1952 over 1940	189

Mr. KIRWAN. You think then that supervision under the Connally Act has done a lot for the survival of that industry?

Mr. SWANSON. I think it has.

Mr. KIRWAN. And being done on a very good, economical basis?

Mr. SWANSON. I think from the viewpoint of the oil supply necessary for the good of the country, which is the point of particular interest to me, that the Connally Hot Oil Act has been one of the several factors mentioned in Mr. Stewart's prepared statement which has made possible a background or base of oil supply that has enabled the country to survive effectively the Second World War and in the post-war period.

THE CONNALLY ACT AND ITS PURPOSE

Mr. KIRWAN. This is the only agency then that has anything to do with the enforcement of the Connally Act?

Mr. SWANSON. Yes, sir.

Mr. KIRWAN. How many men—do you know offhand—come under Interstate Commerce that handle or have something to do with oil?

Mr. SWANSON. I would not know. They handle motor carriers and motortruck transportation of oil, and they handle the oil pipelines and rail transportation of oil.

Mr. KIRWAN. It is only in the enforcement of transportation, is that it?

Mr. SWANSON. Rates, etc.; yes, sir.

Mr. KIRWAN. And the handling of the transportation?

Mr. SWANSON. Yes, sir; safety, and so forth.

Mr. KIRWAN. But the Connally Act is at the source?

Mr. SWANSON. At the source; yes, sir.

Mr. KIRWAN. You are seeing that the States conform to the law and help to preserve our resources as I understand it.

Mr. SWANSON. The Federal Government is lending its support to the State conservation acts by preventing the facilities of interstate commerce from being used to violate the State law.

Mr. KIRWAN. In other words, they are doing what Theodore Roosevelt had in mind when he established the reclamation and conservation services of this Nation back in 1902. It is the purpose of your agency to see that the oil potential is not wasted and that there is no waste in the oil industry, is that correct?

Mr. SWANSON. The Connally Act is a force in that connection to aid in preventing physical waste in oil and gas production. I believe it was Mr. Roosevelt who at that time called attention to the great waste in coal mining and production.

Mr. KIRWAN. All of our resources came under consideration. On the Allegheny River we used to set a fire every 3 weeks to get the river to move at Titusville and Franklin. After they drilled a well, there was no way to cap it, and it started flowing and continued to flow until it was dry and billions of barrels of oil were lost in the State of Pennsylvania alone.

Mr. SWANSON. I was in Mr. Norrell's State in 1921 after the El Dorado Field came in. I saw oil flow down into corn patches. The dirt had been piled up in dikes and the oil flowed in over these cornfields and one could see the dead cornstalks sticking up.

REIMBURSEMENTS FROM NON-FEDERAL SOURCES

Mr. KIRWAN. Where does the $800,000 from the non-Federal source come from on page 4 of the justifications?

Mr. SWANSON. That is from the sale of used automobiles, the turn-in value of second-hand cars.

Mr. KIRWAN. How many?

Mr. SWANSON. I think about two. One last fiscal year and two this fiscal year.

Mr. KIRWAN. The sale of automobiles comes under the heading "Reimbursements from non-Federal sources"?

Mr. SWANSON. Yes, sir.

EFFECTIVE MINIMUM JOB WITH THE PRESENT STAFF

Mr. KIRWAN. Then, you honestly think the Connally Hot-Oil Act and the men who are enforcing that act are doing a great job; you do not think you are overstaffed?

Mr. SWANSON. No, sir; I think they have been doing a very effective minimum job of enforcement—adequate minimum job. The effect of the enforcement against one company will spread throughout the whole industry and will cause many others to tighten up their operations.

TUESDAY, FEBRUARY 24, 1953.

RESEARCH IN THE UTILIZATION OF SALINE WATER

WITNESSES

GOODRICH W. LINEWEAVER, SECRETARY'S REPRESENTATIVE
DAVID S. JENKINS, COORDINATOR
JOSEPH J. STROBEL, CHEMICAL ENGINEER, SALINE-WATER PROGRAM

Amounts available for obligation

Appropriation or estimate (obligations incurred):	
1953	$125. 000
1954	400, 000

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
1. Departmental activities:			
Research coordination and administration		$44, 000	$65, 000
Evaluation of research and processes		25, 000	35, 000
2. Nondepartmental activities: Research and evaluation of processes (consultants, contracts, and grants)		56, 000	300, 000
Obligations incurred		125, 000	400, 000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions		8	8
Average number of all employees		10	15
Average salaries and grades:			
General schedule grades:			
Average salary		$6, 500	$6. 658
Average grade		GS–10.1	GS–10.1
01 Personal services:			
Permanent positions		$57, 803	$84, 960
Regular pay in excess of 52-week base		197	200
Total personal services		58, 000	85, 160
02 Travel		8, 000	11, 840
04 Communication services		300	300
06 Printing and reproduction		1, 000	2, 000
07 Other contractual services		12, 000	240, 000
Services performed by other agencies		4, 000	20, 000
08 Supplies and materials		200	200
09 Equipment		1, 500	500
11 Grants, subsidies, and contributions		40, 000	40, 000
Obligations incurred		125, 000	400, 000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations start of year			$45,000
Obligations incurred during the year		$125,000	400,000
		125,000	445,000
Deduct unliquidated obligations end of year		45,000	65,000
Total expenditures		80,000	380,000
Expenditures are distributed as follows:			
Out of current authorizations		80,000	335,000
Out of prior authorizations			45,000

Mr. JENSEN. The committee will come to order.

We have Mr. Lineweaver before us who will explain the justifications for the $400,000 which is requested for the saline water research program. Mr. Lineweaver.

GENERAL STATEMENT

Mr. LINEWEAVER. Thank you, Mr. Chairman. Public Law 448, 82d Congress, 2d session, authorized the Secretary of the Interior to conduct a program of research into development of practical means for the economical production, from sea or other saline waters, of water suitable for agricultural, industrial, municipal, and other beneficial consumptive uses, and for other purposes.

The act authorizes the appropriation of $2,000,000 for a 5-year period and limits the Department's expenses for correlation and coordination of the program to approximately $100,000 for each of the 5 years. The legislative history reveals the intent of the Congress to assure that maximum use be made of the talents and facilities available in private research institutions, universities and colleges, and industry. The legislative committees fully recognized that services of highly specialized scientific personnel, including consultants, at levels higher than those ordinarily available within the framework of Federal classified service, are essential for the research, development of processes, and evaluations. The research to which this program is directed is divided into two major related objectives:

1. Conversion of sea water to beneficial uses, recognized as a long-term program with many ramifications.

2. Demineralization of brackish water, primarily for adaptation for agricultural and industrial purposes, which may well be a substantial step toward the development of economical means of converting sea water.

In recognition of the acute shortages of fresh water for irrigated agricultural and industrial purposes, and threats to domestic supplies in many areas of the Nation and the need to take immediate steps toward coordinating and stimulating research in the development of processes which would provide additional water supplies, an appropriation of $125,000 was made in the closing days of the 82d Congress to initiate the program. The current request includes $275,000 supplemental appropriation to provide the full $400,000 authorized under the act for fiscal year 1953, and $400,000 for fiscal year 1954.

Of the $125,000 appropriated for fiscal year 1953, only about $69,000 will be used within the Department. This includes a small

coordinating staff in Washington, certain work by the Denver Laboratory of the Bureau of Reclamation, and limited work by the Bureau of Mines and the Geological Survey, in addition to the per diem and expenses of nine advisers to the Secretary of the Interior on the program.

This leaves some $56,000 of the 1953 appropriation for contracts, grants, and consultants' services needed for evaluation of processes and proposals. Of the $56,000 available for this contractual service, $35,000 has now been contracted. Included in this total is 1 grant for $5,000 to assist in the completion of research already begun by a university on (*a*) a small solar still, (*b*) a thermal difference plant, and (*c*) utilization of waste heat in conversion of sea water to potable uses; and 1 contract in the amount of $30,000 for research in the development of 1 ion selective membrane process looking to the demineralization of both brackish water and sea water. An additional firm proposal in the amount of $3,000 for preliminary research on a solar evaporation process, upon which the feasibility of a subsequent developmental contract is to be based, has been received. An initial research project to cost between $5,000 and $10,000 to determine the quality of selected saline ground and surface waters in prairie States needed for the planning of research on specific processes is being prepared. This probably will take the form of a grant to a State institution. The remaining $8,000 will be required for research consultant services needed in evaluating the proposals and results of this research.

The list of potential processes and phenomena which might be developed for this purpose was presented in a compendium of information which has been prepared since the initiation of the program. That outline of processes with explanatory notes and a bibliography of technical material and patents indicates clearly that many different approaches to the problem should be investigated concurrently if economically feasible processes are to be developed within a reasonably early time. Several hundred prospective cooperators have received that brochure of information and have been invited to submit proposals relating to any of the suggested processes. Already more than 20 have indicated a clear intent to submit applications in accordance with procedures which have been developed. A number have provided sufficient written or oral information to indicate the nature of their proposals, which include further development of special permionic membranes, use of ultra high-frequency current, use of superheated steam, and an additional application of solar evaporation.

In addition, 2 theoretical research undertakings have been proposed; 1 to determine the probable maximum economies which can be achieved by processes already developed or clearly conceived, the other to analyze all possible process variables related to the much developed but little analyzed vapor compression cycle. The sponsors of these proposals have made it clear that they are prepared to proceed almost immediately, when funds are available.

Additional information indicates that proposals will be made in the fields of permionic membranes, multiple-stage evaporation, use of solar energy, geophysical heat, separation by freezing, underwater combustion, use of molecular oil films, and thermal difference plants utilizing marine energy, amounting to much more than the $400,000 requested for 1954. Thus it is certain that all of the $275,000 supple-

mental appropriation being requested and the $400,000 requested for fiscal year 1954 can and will be used for productive coordinated research and development applied to the solution of this problem.

SECRETARY'S ATTITUDE TOWARD PROGRAM

You recall that on February 3 we made a presentation of the program with respect to the supplemental estimate of $275,000, which appears on pages 348 to 369 of the hearings on the second supplemental appropriation bill for 1953.

By reference to those hearings you will see that there is a full description of the general objectives of the program, and, since that has been comparatively recent, I assume that it is not necessary at this time to repeat those details.

However, I would add to that statement with a letter dated February 20, 1953, from Secretary McKay to Senator Francis Case of South Dakota, who was one of the sponsors of the legislation which became Public Law 448, authorizing the program of saline water research.

I request permission to submit the Secretary's letter for the record and to call your attention to the endorsement that the Secretary gives the program, and I will read a paragraph that is pertinent to this hearing. This was in connection with the supplemental hearing on the supplemental estimate before the Senate Appropriations Committee yesterday, and in this letter the Secretary says:

Mr. Lineweaver is being requested to make the same type of presentation to the Senate Appropriations Committee (that was yesterday) with respect to the supplemental appropriation estimate for fiscal year 1953 that was laid before the House subcommittee, but I have not studied the matter sufficiently to determine whether it is necessary to have the full amount of the supplemental estimate of $275,000 appropriated. (You will recall that this committee allowed $50,000 in the second supplemental appropriation bill.) Then the Secretary continues:

With respect to the budget estimate of $400,000 for fiscal year 1954, which will be presented to the House Committee on Appropriations early next week [that is this week] I advise that this estimate will be reviewed in accordance with the instructions issued by the Bureau of the Budget for reexamining the entire fiscal year 1954 budget.

(The letter referred to follows:)

UNITED STATES DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington 25, D. C., February 20, 1953.

HON. FRANCIS CASE,
United States Senate, Washington 25, D. C.

MY DEAR SENATOR CASE: I have delayed a reply to your letter of January 28 pending action of the Appropriations Committee of the House of Representatives on the supplemental estimate of $275,000 for the saline water program for fiscal year 1953. I am advised that the committee included in the bill an item of $50,000 for "contracts with research organizations and private firms for work on treatment of saline water." The House of Representatives approved the item in the passage of H. R. 3053, the Second Supplemental Appropriation Act, 1953.

Previous to the hearings before the House subcommittee, I discussed the program briefly with Mr. Lineweaver, who told me of your interest in the subject. I advised him that, while I had not had the opportunity to familiarize myself fully with this particular activity, I favored its continuance as a going program. Particularly, I was impressed with the importance of the research in connection with increasing the supplies of potable water in the interior areas of the West for irrigation, industrial, and domestic purposes. I noted that this phase of the program, in which you have been especially interested because of its relation-

ship to the demineralization of waters of South Dakota and other western streams, has been receiving emphasis.

It would seem that the development of economic methods of purification of brackish water for irrigation and related purposes offers opportunity for earlier solution and at the same time will contribute to the long-term objectives of desalting sea water. I strongly favor full development of western water resources for irrigation, industrial, and domestic uses, and I hope this program will make a substantial contribution to that objective.

I also favor the closest possible cooperation with State universities and colleges and other educational institutions, as well as with research organizations and private firms, in the activities and also Government agencies. The maximum degree of coordination is to be carried out in order to avoid duplication and unwarranted expenditure of public funds.

Mr. Lineweaver is being requested to make the same type of presentation to the Senate Appropriations Committee, with respect to the supplemental appropriation estimate for fiscal year 1953 that was laid before the House subcommittee, but I have not studied the matter sufficiently to determine whether it is necessary to have the full amount of the supplemental estimate of $275,000 appropriated. With respect to the budget estimate of $400,000 for fiscal year 1954, which will be presented to the House Committee on Appropriations early next week, I advise that this estimate will be reviewed in accordance with the instructions issued by the Bureau of the Budget for reexamining the entire fiscal year 1954 budget.

I appreciate your interest in this as well as other programs of the Department of the Interior of which I have been advised, and I trust we may have an early opportunity to have a full discussion of these subjects.

Sincerely yours,

DOUGLAS MCKAY,
Secretary of the Interior.

PROPOSED USE OF FUNDS REQUESTED

Mr. LINEWEAVER. This estimate, Mr. Chairman, is for $400,000 for the fiscal year 1954. It follows the general line of explanation given to the committee in connection with the supplemental appropriation as to the objectives of the program.

There is one matter that I desire to point out, which is that we expect to operate with a very small headquarters staff which will include 4 to 5 professional people, which will be headed by Mr. Jenkins, and 4 or 5 clerical assistants in administrative and clerical work.

In addition to that I will ask Mr. Jenkins to explain briefly how the remainder of the funds are to be expended, assuming that the full amount of the request is granted.

Mr. JENKINS. Mr. Chairman, in any research project of this kind we have several paths that we could follow. In this particular project we have decided to proceed at first by asking the people who are qualified, research scientists, to propose to us lines of action that they feel should be worked on after they had had an opportunity to review our summary of previous research and possible lines of future research in this field. That summary was prepared in brochure form, copies of which have been furnished to the committee.

As the basis for that brochure, technical people in the Department of the Interior, with help from other Government agencies, and consultation from outside private scientists, compiled a compendium of information that we felt included all possibilities of separating salt from salt water.

This compendium was sent to over 1,000 private organizations and universities, which were requested to advise us of three things:

First, what, if any, additional lines of scientific investigation should be considered in the program.

Second, what lines of research each would be interested in working on themselves; and

Third, what funds they had available to apply to this. The latter was requested because we understand that we are to coordinate this work primarily and to stimulate it to a small degree. Therefore, it was felt that we should endeavor to determine if private funds were available as well as Government funds. From those replies we have hoped to prepare a complete cross section of available research interest, facilities, personnel and funds, to apply then the $400,000 to the weak areas, and to bring to the attention of the Congress the remaining worthy research for which funds are not available.

We had anticipated that the $400,000 a year would not go very far toward solving the problem, and not very far toward financing all of the research that should be undertaken, and I am sure that is correct.

Now we have been receiving replies. They are just coming in now, and one is received almost every day.

NUMBER OF PROPOSALS FOR RESEARCH WORK

We have word from some 28 or 29 individual organizations, universities, and private industries of very high standing advising us that they have under preparation that many proposals for research and development work in this field.

Of those 28 or 29, 6 have been received in sufficient detail to justify an evaluation according to a very rigid evaluation procedure that we have set up, and there are about 5 or 6 others that have been discussed with us sufficiently so that we can estimate the cost of them.

Of the first 6, 2 contracts have been let amounting to $35,000, and the remaining 4 amount to about $35,000. Together with these other 5, the total is $87,000, as we estimate it now; and, with four or five others which we have firmly in mind, the total comes to $116,000. There are 17 others that are definitely promised. If they follow this average of about $13,000 each, that would be about $200,000 for them. I expect there will be 10 or 15 more at least between now and the 1st of July.

CONTRACTS FOR RESEARCH AND DEVELOPMENT

Mr. JENSEN. Please let me ask you a question right there.

Mr. JENKINS. Yes, sir.

Mr. JENSEN. You say you have let two contracts?

Mr. JENKINS. Yes, sir.

Mr. JENSEN. Where did you get the money to let those contracts?

Mr. JENKINS. From the $125,000.

Mr. JENSEN. All right.

Mr. JENKINS. This statement so far is without regard to where the funds come from, but we have let contracts for only $35,000 so far.

Mr. JENSEN. Will you furnish a list of the contracts that have been let to date and the amount of the contracts?

Mr. JENKINS. Yes, sir.

(The matter referred to is as follows:)

Existing research contracts and grants, as of Feb. 24, 1953

Name or business of sponsor	Process or phenomenon to be investigated	Amount
Existing contracts and grants:		
1. University of California (grant; completion of research started by university).	Solar still, thermal difference plant, use of waste heat.	$5,000
2. Ionics, Inc. (contract), Cambridge, Mass..	Ion-selective membranes	30,000

Mr. JENSEN. For the record, to whom are these contracts let?

Mr. JENKINS. Ionics, Inc., of Cambridge, Mass., for laboratory work on a process that they have developed for other purposes. That was for $30,000.

I would like to say right here that Ionics, Inc., presented us with a complete research program amounting to $96,000 which involved a small amount of laboratory work, construction of a unit, field testing of the unit, and delivery of the unit.

Because we did not have $96,000, we could not enter into that contract or any part of it. We had to enter into an entirely different contract that did not depend upon subsequent appropriations, and that is this $30,000 contract for laboratory work.

However, we know that the total job if it is now undertaken, as I feel it should be, would cost more than $96,000 because Ionics will have to retool when they go into the other part.

GRANT TO THE UNIVERSITY OF CALIFORNIA

Mr. JENSEN. With whom were the other funds contracted?

Mr. JENKINS. That was the University of California, a grant of $5,000.

Mr. JENSEN. That was an outright grant?

Mr. JENKINS. Yes, sir.

Mr. JENSEN. What did you tell them you would expect them to do with the $5,000?

Mr. JENKINS. I have a copy of that grant which could be placed in the record if you would like to have it.

Mr. JENSEN. How long is it?

Mr. JENKINS. About 4 pages.

Mr. JENSEN. Put it in, without objection.

Mr. KIRWAN. I have no objection.

(The matter referred to is as follows:)

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D. C., January 5, 1953.

Research grant.

THE UNIVERSITY OF CALIFORNIA,
Berkeley, Calif.

GENTLEMEN: I am pleased to inform you that the sum of $5,000 is granted by the Department of the Interior to the University of California for the support of continuation of research on salt water demineralization as more specifically set forth in the document numbered UCB–Eng–641 which, with minor revisions in the budget, is hereby made a part of this research grant. The research will be under the direction of Prof. Everett D. Howe and will be completed by September 30, 1953. This grant will be paid as follows: $3,000 upon receipt of acknowledgment by the University of California as provided below; $1,000 on March 1, 1953, and $1,000 after receipt of final report as specified below.

It is a condition of the grant that progress reports be provided bimonthly, and a final report after completion of the research under this grant, and that provisions will be made for Department representatives to observe and discuss with the grantee the progress of the work being performed under the grant.

It is a condition of this grant that it may be revoked in whole or in part by the Department of the Interior after consultation with Dr. Howe and the grantee, except that a revocation shall not affect any commitment which had become firm prior to the effective date of the revocation; and that funds not committed by the grantee prior to the conclusion of the work contemplated under this grant shall be returned to the Department of the Interior.

It is a condition of this grant that disposition of domestic patent and other rights in any inventions made or conceived during the research shall be the responsibility of the grantee; that disposition of foreign patent and other rights to any such invention shall be determined by the United States Government; that the grantee shall give the Department of the Interior reasonable notice of application by the grantee or other person or institution for a foreign or domestic patent on any such invention; and that upon issue of a domestic patent on any such invention, the patentee shall grant the Government a royalty-free, nonexclusive license for use of such invention for governmental purposes.

An original and copy of this letter is forwarded to you. Please return the original duly acknowledged in the space provided for so that prompt initial payment can be made.

All future correspondence should be addressed to Goodrich W. Lineweaver, Secretary's representative, saline water program, Department of the Interior, Washington 25, D. C.

Very sincerely yours,

GOODRICH W. LINEWEAVER,
Secretary's Representative.

Approved January 5, 1953.

OSCAR L. CHAPMAN,
Secretary of the Interior.

Accepted:

THE REGENTS OF THE
UNIVERSITY OF CALIFORNIA,
By E. A. JOHNSON, *Chairman.*
By GEO. D. MALLORY,
Assistant Secretary.

Approved as to form.

JNO. U. CALKINS, JR.,
Attorney for the Regents of the University of California.

SALT WATER DEMINERALIZATION, UCB–ENG–641

GENERAL

The continuing experimental program at the University of California, Berkeley, has included three separate installations, namely:

1. A diesel engine waste-heat plant of the triple-effect type;
2. A solar distiller;
3. A low temperature difference combined power plant and distiller.

The details and progress on these three units have been described in progress reports, which are available in the Institute of Engineering, research. The general background has recently been discussed in two published papers, by Everett D. Howe:

1. Fresh Water From Salt Waters, Transactions, American Geophysical Union (vol. 33, No. 3, June 1952).

2. Sea Water as a Source of Fresh Water, Journal of American Water Works' Association, August 1952 (vol. 44, No. 8, pp. 690–697) (see also Langelier's discussion, pp. 697–700).

PROPOSED PROGRAM

The proposed program is a minimum one intended only to permit completion, testing, and evaluation of these installations, as described in detail below, and is limited to that work which can be done more effectively now than later. A more extensive proposal will be formulated later if additional Federal appropriations indicate a possibility of financial support for such a program.

1. *Diesel waste-heat plant.*—This plant is complete in its initial form and has been operated enough to eliminate most of the mechanical difficulties It is

planned to operate it for the equivalent of 3 weeks in order to measure performance under different conditions. Funds needed would cover services of 1 engineer, 1 mechanician, and 2 observers.

2. *Solar still.*—The five-unit still is operating continuously. It is highly desirable that approximately 2 hours per day for 7 days per week be spent in the taking of data on its performance, as well as upon the weather. The above time also includes the servicing of the units. Also, it would be highly desirable to proceed without delay to the experiments with warm water feed, simulating the use of warm water from process plants. Money is available for purchase of the heating unit, and additional funds are needed for instrumentation and the taking of data. The labor time involved is approximately 80 man-hours for instrumentation and initial tests with a continuing time requirement of 1 hour per day.

3. *Low temperature-difference plant.*—This unit is complete except for the 10,000 r. p. m. dynamometer for the turbine. It is estimated that the dynamometer can be designed and constructed, and performance tests on the plant carried out in a period of 3 months. Mr. Beorse, designer of the plant, has been disconnected from the project since July 31. He is still in this area and his services can be utilized if funds become available in the very near future. If long delays in fund allocation occur, he probably will have accepted employment elsewhere and be no longer available. The total funds needed include the services of Mr. Beorse, a mechanician for 3 months, and rental of a steam generator for about 1 month.

SUPERVISION

The proposed program will be supervised by Prof. Everett D. Howe, associate dean of engineering at the University of California, Berkeley.

BUDGET

The budget indicated below provides only partial support for the proposed program, the remainder being supported from university sources.

Budget

A. Direct cost:	
Scientific and supporting personnel:	
1 research engineer	$1,366
1 laboratory mechanician	800
1 engineering aid	780
Institute of Engineering aid General Services for payroll, budget control, processing purchase orders, expediting, property accountability, etc	134
State employees retirement system, matching contributions	195
Compensation insurance	30
Equipment:	
Rental of steam generator	200
Construction of solar still	720
Material and supplies: Fuel	25
Total direct costs	4,250
B. Indirect costs: Administrative and facilities	750
Total	5,000

NATIONAL SCIENCE FOUNDATION

Mr. JENSEN. What is the National Science Foundation doing in this work?

Mr. JENKINS. So far, to my knowledge, they have not undertaken any work in this particular activity.

Mr. JENSEN. You have been in contact with them?

Mr. JENKINS. Yes, sir.

Mr. JENSEN. What do they say?

Mr. JENKINS. They asked us to designate a liaison officer. I was assigned that responsibility and met with them several times. We

have worked out a cooperative agreement with the National Science Foundation which I would like to place in the record and which provides among other things that on the basic research, which the National Science Foundation is authorized to conduct, we will ask them to review and evaluate our projects, and they will, so far as their funds will permit, undertake those basic research aspects.

(The matter referred to is as follows:)

COOPERATIVE AGREEMENT BETWEEN THE NATIONAL SCIENCE FOUNDATION AND THE DEPARTMENT OF THE INTERIOR, SALINE WATER PROGRAM

In consideration of the fact that the National Science Foundation is engaged in a program of support to basic scientific research, and that the Department of the Interior is engaged in a somewhat similar program of support to research in demineralization of saline waters, which is primarily of an applied nature but may include some basic research, it is mutually agreed as follows:

1. Proposals received by the Department of the Interior for research under the saline water program which envolve a significant amount of basic research will be referred to the National Science Foundation for technical evaluation, primarily of the phases involving basic research, and for coordination with other related research.

2. The Foundation will, through its established procedures, carry out that portion of such research undertakings as relate primarily to basic research within the limits of its facilities and funds available for this purpose.

3. Proposals received by the National Science Foundation for research in or development of processes for demineralization of saline water will be referred to the Department of the Interior for its information and coordination with other research and development in this area. Applications for research in this field which are primarily of an applied or developmental nature will be evaluated and executed by the Department of the Interior. Such applications which involve a significant amount of basic research will be processed either by the National Science Foundation or the Department of the Interior, as mutually agreed for each proposal.

4. The Foundation and the Department will make available to each other the names of consultants employed by either in the fields of activity of the other, and the services of such consultants will be utilized by each to the greatest practicable extent.

5. The Foundation and the Department will continue to keep each other informed about research in their respective fields of activity being conducted or supported by each other or by other organizations.

NATIONAL SCIENCE FOUNDATION,
By PAUL E. KLOPSTEG, *Associate Director.*

December 10, 1952.

UNITED STATES DEPARTMENT OF THE INTERIOR
SALINE WATER PROGRAM,
By DAVID S. JENKINS, *Secretary's Acting Representative.*

January 29, 1953.

ACTIVITIES IN FOREIGN COUNTRIES

Mr. JENSEN. Is any part of this request to be used in conjunction with activities in foreign countries? Are foreign countries cooperating or collaborating in any way, or do you get funds from other departments of Government for this work?

Mr. JENKINS. No, we do not get any other funds for this work. The work is research work, and we have made an administrative determination that we will not entertain research proposals from people in foreign countries. We feel that there is enough talent in this country to profitably use the small appropriation. However, we must keep up with the activities in foreign countries, and do so; in

that connection we have been invited to send a representative to a European working group that has been formed on this subject.

Mr. JENSEN. Do you propose to do that?

Mr. JENKINS. Yes, sir, if we can possibly spare the time.

Mr. JENSEN. Who will that be?

Mr. JENKINS. I expect I may have to go.

QUALIFICATIONS AND DUTIES OF PERSONNEL

Mr. JENSEN. What is your background in this kind of work?

Mr. JENKINS. I have a statement here of my biodata, that was recently prepared for another purpose. If you would like to have it put in the record I will do so.

Mr. JENSEN. Without objection I think it should be included.

(The matter referred to follows:)

BIOGRAPHICAL DATA, DAVID S. JENKINS

Native of Colorado. Education in civil engineering at University of Colorado and George Washington University (BS–CE). Majored in hydraulics and hydrology.

In 1929, after 2 years with a development firm in Colorado investigating and establishing water and land rights, was engaged by the United States Geological Survey in water resources investigations and research in the Rocky Mountain and Plains States, Atlantic seaboard, and Tennessee Valley. Developed new investigational procedures and conducted such studies as those of floods, droughts, winter flows, power potentialities, sedimentation, and ground-water resources.

In 1935, was selected by the newly formed Soil Conservation Service, as 1 of a group of 5 from the Geological Survey to assist that Service in the development and direction of its research programs. As project leader, and later manager of the blacklands experimental watershed in Texas, directed research in all aspects of soil and moisture conservation, including hydrological, meteorological, agricultural, soil and sedimentation problems. This research was conducted entirely with Government personnel and facilities.

1942–46, Civil Aeronautics Administration in charge of airport research, including soils, paving, drainage, location, layout and configuration, lighting, and economics. This work was performed entirely by research contracts with universities and private industry. Was responsible for early development of procedures and policies for conducting Government sponsored research by universities and private industry, a form of research administration which has since become widely used by Government agencies. Also developed procedures for the advance planning of research programs which were adopted as standard practice by the Civil Aeronautics Administration.

1946–52, Chief of Physical Data Section of the Bureau of Reclamation, administered a variety of activities related to water and land development, including preparation and analysis of plans for multiple-purpose river-basin developments; negotiation of international water treaties as executive secretary of two international engineering boards; and direction of technological developments of new sources of water by means of sea-water conversion and artificial precipitation, and of new sources of energy.

When, in 1952, Congress recognized the need for a research program dedicated to the development of practical means of augmenting the fresh-water supplies of the Nation by authorizing the initial phase of that program, was selected to head the office of coordination in the saline-water conversion of the Department of the Interior, as coordinator, in charge of the research program.

Member of the American Society of Civil Engineers; the American Geophysical Union of the National Research Council; the American Meteorological Society; the American Association for the Advancement of Science; the University Club of Washington, D. C.; the Phi Delta Theta College Fraternity; and the Presbyterian Church.

Contributor, coauthor, or author of numerous published technical works including Demineralization of Saline Waters, United States Department of the Interior, October 1952.

Mr. JENKINS. Would you like to have me go into it further, Mr. Chairman?

Mr. JENSEN. No.

Mr. JENKINS. We have arranged tentatively with the European committee to have one of our consultants, who is much more highly trained in chemistry and in these particular scientific fields than I, to attend this meeting in Europe also.

Mr. JENSEN. Also?

Mr. JENKINS. Yes, sir. We have not selected the man yet.

Mr. JENSEN. You are asking for eight people in administrative personnel, are you not?

Mr. LINEWEAVER. Yes, sir.

Mr. JENSEN. Who are those people? Are they qualified scientists, or are they simply administrators?

Mr. JENKINS. Mr. Strobel, on my right, is my only employee at the present time.

Mr. JENSEN. What is your background?

Mr. STROBEL. I am a graduate chemical engineer and a registered professional engineer (District of Columbia). I have been engaged in research and development work for more than 15 years. I was engaged in that work at the Naval Ordnance Laboratory for 6 years prior to accepting this position. I have had experience in research and development administration.

Mr. JENSEN. Have you ever worked on this proposition of saline control?

Mr. STROBEL. As to directly working on this problem I have not, but the chemical-engineering features are part of my educational background, and in addition I have research and development administrative experience.

As the Government is not carrying out this research work itself my duties are of technical administration and coordination nature. The people who actually do the research work will have a closer specialized background to the particular problem of demineralization of saline waters.

CONCENTRATION OF RESEARCH WORK

Mr. JENSEN. Now, let me ask you this: As you remember, Mr. Lineweaver, when you appeared here asking for a supplemental of $275,000, I asked this question: Are you proposing to scatter this money so thinly over a number of institutions and private concerns that no one will be greatly interested in it?

Now, it seems to me that if we are going to appropriate this money in any quantity that you should enter into a contract with not more than 3 concerns, or maybe not more than 1. I believe the best concerns in this country, to our knowledge, should be picked out and whether they are colleges or private organizations, you should say to them, "Now, we picked you, and we are giving you this contract because we think you are the best qualified and the best fitted to do this job." By so doing they will not just have a few dollars to work with, but maybe $100,000, enough to really put good men to work on it. What do you think?

Mr. JENKINS. Mr. Chairman I noticed in the print of the hearings that your question at that time was not answered, and I regretted

that it was not. We skipped over it before, and I am glad to have the opportunity to discuss it now.

At a certain time, which we have not reached yet, we will find it desirable and necessary to enter into the contracts that you suggest with 1 or 2 or 3 firms on processes on which we have shown the feasibility can be developed or has been developed. Until then, however, we have here a list of some 30 or more different types of processes that no one has worked on.

Mr. JENSEN. Let me ask you this: You say you have 30 different types of processes that no one has worked on to any degree at all. Is it just an idea that somebody has that they would like to try out?

Mr. JENKINS. No, sir, not exactly. These are phenomena and processes by which we know or believe that salt can be separated from water, but whether it can be done economically no one knows, because until recently there was no incentive to determine whether it can be done. The need for water was not made this apparent until now.

Now, on distributing the funds at the present time, research of this kind can be performed very productively by doing exactly what we are discussing, placing small grants to students and others in universities where each one can work, without rigid guides, use his genius and scientific training, all for a very small amount of money. Now, it is grants of that kind which history has shown are largely productive of basic information, and about 1 out of 10 comes up with a practical result. We feel that if 1 out of 20 develops an answer to this question, the expenditure will be justified.

Mr. JENSEN. So, you believe that it might be money well spent to give a number of universities $5,000 or $10,000 to experiment with the method that some student or some professor of science has devised to accomplish this purpose in the hope that one of them will come up with the best answer?

Mr. JENKINS. Yes, sir; and we are coordinating the entire undertaking so that we do not have a great many working on one little facet of the problem and no one working on others.

INTERIOR DEPARTMENT PROPER AGENCY TO DO JOB

Mr. KIRWAN. Mr. Jenkins, are there any other agencies of Government that are trying to experiment with, or get the same results from salt water?

Mr. JENKINS. The Department of Defense, of course, as you know has the responsibility for such purposes as providing water for troops and shipboard use; but for the purpose of producing water in large quantities, for these purposes, at low cost, they are not working on that.

I might refer to the Senate hearings in which the legislation was discussed. The Secretary of Defense, as I recall it, wrote a letter to the Senate committee stating that legislation for this purpose was necessary.

Mr. KIRWAN. In other words, you think that the Interior Department is the proper agency to handle it?

Mr. JENKINS. Do I think the Interior Department is the proper agency to handle it?

Mr. KIRWAN. Yes. You say the Navy, or one of the agencies of the Government, is trying to get the same results?

Mr. JENKINS. No, sir; what I did say was that the Department of Defense provides fresh water for its military purposes.

Mr. LINEWEAVER. Mr. Kirwan, the point there is that the Navy and the other defense agencies are not concerned with the economic cost of it, as they have to have water for their troops for shipboard use.

Mr. KIRWAN. He said that they are making an effort to get some for the troops.

Mr. LINEWEAVER. Yes, sir.

Mr. KIRWAN. The point I am trying to get over, Mr. Lineweaver, is this: Should your agency do it, or should the Navy do it on a larger scale?

Mr. LINEWEAVER. The Department of the Interior is the agency primarily concerned with the water for agricultural, irrigation, industrial, and domestic purposes in the West and elsewhere.

Mr. KIRWAN. Yes; I understand that. He said it was for the troops that the Navy is doing it.

Mr. LINEWEAVER. Yes, sir.

Mr. KIRWAN. But the point I am trying to get at is: Do you think that this is the proper agency of the United States Government to be doing this work?

Mr. LINEWEAVER. Yes, sir. Since the Department of the Interior is responsible for it, we are seeking to provide an economical means, first, for the demineralizing of brackish water for irrigation, industry, and domestic purposes which we feel will lead to the achievement of the long-term objective of desalting sea water for potable uses at low cost.

Mr. KIRWAN. I am asking you those questions now before some other agency springs up and says that they are the proper ones; that they have the ability and everything to go into this work, and not the Interior Department. For instance, I think the Department of Agriculture reached in about 40 or 50 years ago and took away just about half of your Department from you.

GRANTS AND CONTRACTS PROPER METHOD FOR STARTING PROGRAM

Mr. LINEWEAVER. That is right.

Mr. KIRWAN. Do you think the method you are now using of making grants to universities and to men who are trained in this field is a much cheaper method than building pilot plants of your own?

Mr. LINEWEAVER. In the present state of the development of the process, I would say yes, Mr. Kirwan.

Mr. KIRWAN. Do you think that is the best method and the cheapest method now?

Mr. LINEWEAVER. Yes, sir. Until the program is developed and until the economic means indicated, as Mr. Jenkins has explained, are achieved, we are not prepared to recommend a heavy investment by the Federal Government for a pilot plant or a demonstration plant or whatever you may call those facilities. We feel that this can be done within the restrictions of Public Law 448 until we can demonstrate to the satisfaction of the Congress that we do have a plan which would justify lifting the restrictions that are imposed on appropriations by Public Law 448.

Mr. KIRWAN. Then you can tell the country you are actually in a position to give them good water and cheap water?

Mr. LINEWEAVER. Yes, sir. That is the objective. While we did not recommend these restrictions, since they are imposed on us by the Congress, we proposed to live within them until we can demonstrate that they should be modified or lifted. We consider that a matter of good faith with the Congress, and we realize if we are going to advance this program we have to demonstrate it, even with the limited funds we have, through cooperation with private industry, which has manifested considerable interest in this, as well as through cooperation with research organizations and colleges and universities; and we feel that there is a strong indication that in time, through coordinated research, results can be demonstrated.

Mr. KIRWAN. As acting head of the agency, you think that you are doing a good job; that you have a good organization and are getting good results?

Mr. LINEWEAVER. Yes, sir.

RESULTS THUS FAR

Mr. NORRELL. Mr. Lineweaver, there is no argument about the possibility of doing the job. That has been known, I guess, for a period of at least 10 years.

Mr. LINEWEAVER. Yes, for a good many years.

Mr. NORRELL. The Navy for a long time has been making ocean water suitable for drinking. The goal is to find cheaper and more economical ways and means of purifying the water.

Mr. LINEWEAVER. Yes, sir.

Mr. NORRELL. Now, as I understand it, the Interior Department is nothing more than a coordinator of the information obtained from the Navy, the Army, universities, colleges, and so forth. Am I correct?

Mr. LINEWEAVER. That is correct, but we use such funds as are appropriated to stimulate research in such directions as Mr. Jenkins explained, Mr. Norrell.

Mr. NORRELL. Yes; I know that. That is very good.

I assume no information has been acquired that would not have been obtainable had this program not started, because you have not been doing the job long enough. That is a reasonable statement; is it not?

Mr. JENKINS. Yes, sir; I am sure I would agree with that.

Mr. NORRELL. You have not acquired any substantial information over the knowledge that we had prior to the beginning of the program, so far as doing this job is concerned on a more economical basis. Am I right in that?

Mr. JENKINS. We know more about it now than we did last July.

Mr. NORRELL. Does the record show the knowledge that you now have that is addition to the knowledge that you had when the program started?

Mr. LINEWEAVER. We will insert a statement of that character in the record.

(The matter referred to is as follows:)

Saline Water Program—Annual Report to the President and to the Congress

INTRODUCTION

This report is submitted in compliance with the provisions of Public Law 448 (82d Cong., 2d sess.) that "The Secretary of the Interior shall make reports to the President and the Congress at the beginning of each regular session of the action taken or instituted by him under the provisions of this act."

The act provides for the development of practicable low-cost means of producing from sea water, or from other saline waters, water of a quality suitable for agriculture, industrial, municipal, and other beneficial consumptive uses on a scale sufficient to determine the feasibility of the development of such production and distribution on a large-scale basis, for the purposes of conserving and increasing the water resources of the Nation.

The present report should be considered as of an interim character and covers activities in the program since enactment of the law, July 3 to December 31, 1952. Because the program is in the formative stage, program needs and requirements for additional legislative authorities will be better understood within the near future and the Secretary of the Interior who takes office on January 20 may desire to submit a supplementary report containing up-to-date information on the progress of the research program together with any specific recommendations for further legislation that appear desirable.

In accordance with the expressed desire of Congress in Public Law 448, maximum cooperation is being sought of existing Government agencies for coordination and direction of the work with heavy dependence upon private technical consultants in specialized fields of science. The actual research and development of low-cost processes is carried out by private interests.

The research to which the program is directed is divided into major related objectives as follows:

1. Conversion of sea water to beneficial uses, recognized as a long-term program with many ramifications.
2. Demineralization of brackish water, primarily for adaptation for agricultural and industrial purposes, which may well be a substantial step toward the development of economical means of converting sea water.

This report describes the establishment of the program, the progress of the work and presents recommendations as to future actions. It will be appreciated that this is a new undertaking, the reporting period is short and time has been needed for activation and organization of the work. Achievements to date include the organization of the necessary groups and committees to carry out the required cooperation and coordination with Federal and other agencies; the carrying out of coordination activities with such groups; the compilation, publication and distribution of a brochure designed to initiate a continuing survey of research as a basis of the program, containing a bibliography and discussion of all known or suggested processes and energy sources directly related to a process; the establishment of procedures for evaluating and processing research and development proposals, grants and contracts; the placing of grants and contracts for development of processes; initial evaluation of several dozen proposed processes and a small amount of laboratory work to evaluate the apparent feasibility of specific research proposals.

Contacts have been made with numerous research groups, industrial concerns and individuals having an interest in the program and in the stimulation of research.

Proposals are being received and evaluated. One grant has been made, and three other promising proposals are currently being negotiated as contracts. These include laboratory applications of ion selective membranes, small scale development of solar heat, waste heat, and thermal difference evaporation studies, research studies into electrogravitational applications and preliminary investigation of a novel distillation process utilizing high-temperature steam.

ESTABLISHMENT OF THE PROGRAM

On June 30, 1952, the Secretary of the Interior under authorization provided by the enacted legislation established the saline water program. He designated Goodrich W. Lineweaver, Assistant Commissioner of Reclamation, as the Secretary's representative, in addition to his other duties, to activate the program, reporting directly to him.

To carry out the objectives of the legislation the following groups have been organized and established:

Advisers to the Secretary of the Interior

This group consists of nine outstanding leaders in various fields of science, education, and industry whose responsibility is to advise the Secretary in regard to the saline water program, primarily with regard to the broad human, economic, and industrial phases of national and international concern.

Departmental Advisers and Assistance Committee

This committee consists of representatives of the Bureau of Reclamation, Bureau of Mines, and Geological Survey, and the Division of Water and Power to provide policy advice.

The function of the committee is also, through their action agencies, to give technical, scientific, and other assistance in the development and maintenance of programs, evaluation of proposals for research and development, inspection of contract research and in the evaluation of results. Representatives of the Divisions of International Activities and Water and Power meet with the committee and provide advice on policy matters.

The Bureau of Reclamation assistance includes that from the engineering laboratories, Office of Chief Engineer, Denver, Colo., whose functions include keeping abreast of technical developments and literature, compilation of bibliographies, preparation of technical information, assisting technical panels in evaluations, making laboratory tests needed for evaluating applications and research results, and supervising selected research contracts particularly in the West.

Interagency Committee

This group is to consist of representatives of agencies having interest in the program and includes those of the Department of the Interior, Department of Defense, and others.

Its function is to assume that the several agencies are informed of developments being undertaken and to prevent unnecessary duplication of research and development efforts.

Technical panels

To make detailed evaluation of the scientific and economic merit of proposals for research and development contracts or grants as a basis for approval of projects, to supervise selected research work, to evaluate results thereof and to conduct research necessary to such evaluations and supervision, scientific organizations, and individuals are engaged by noncompetitive contract or otherwise in each distinctly separate area of research related to the program, in such fields as distillation and evaporation, refrigeration, physical chemistry, solar energy, marine energy, geophysics, and mineral byproducts.

As was the expressed desire of the Congress as set forth in the hearings pertaining to the enacted legislation, use is being made of existing Government facilities, with heavy dependence on private organization assistance and with the administration embodied within existing organizational framework of the Interior Department.

DIRECTION AND COORDINATION OF THE PROGRAM

It immediately became apparent that the necessary direction of the scientific research program; the coordination of research and development of educational institutions, scientific organizations, industrial and engineering firms and other agencies, cooperation with such groups and governmental organizations, and specific coordination or joint conduction of research with the Department of Defense as set forth in the act, would require the detailing of full-time personnel.

Accordingly, a small unit in the Bureau of Reclamation was assigned to handle the work.

On December 15, 1952, by secretarial order, the designation of Goodrich W. Lineweaver as Secretary's representative to administer the program was confirmed, and he was delegated authority to exercise certain powers conferred on the Secretary by Public Law 448.

PROGRESS

Compendium on demineralization of saline waters

As a first step in the formulation of a comprehensive program of research and development, a compendium of existing and potential demineralization processes, phenomena and energy sources was prepared under the direction of the Coordinator with liberal assistance from the three agencies and the Bureau of Ships of the Department of the Navy. A copy of the compendium is made a part of this

report. An introduction to the compendium contains a brief discussion of the legislation authorizing the program, an invitation to recipients to participate in the effort, and the objectives and scope thereof. Outlines of the separation processes and energy sources in the compendium are followed by brief explanations of the probable or possible relationship of each of the demineralization of saline water. Included are literature references with abstracts therefrom providing sources of more detailed information on the subject.

Several hundred copies of the compendium have been forwarded to universities and colleges, research foundations, industrial concerns, and individuals known to have an interest in saline water problems for further distribution to all operating projects. The list of colleges and universities to which the brochure was sent includes all of the land-grant colleges of the 17 Western States and more than 100 others throughout the country. The compendium is intended to provide an inventory of research interest, facilities, and finances available to apply to the problem, to stimulate interest in the research and development, and as a technical reference on the subject.

Submission of research and development proposals

With the assistance of the three bureaus and the cooperation of the National Science Foundation, and following closely the procedures employed by the latter, guides have been prepared by the Coordinator's Office for the information of prospective cooperators as an aid in submitting research and development proposals or applications for grants and contracts for investigational work. Included are adequate discussions of legislation authorizing the issuance of grants and contracts, the nature and scope of proposals, the general plan for making allocations and payments, questions of title to equipment thus purchased, security measures, reports required, advice as to patent rights, and a detailed outline of the type of information which each proposal should contain.

Where appropriate, recipients of the compendium Demineralization of Saline Waters are supplied with the Guides for the Submission of Research and Development Proposals.

Procedure for evaluating applications and proposals

Also, with the assistance of the three agencies and following generally the procedures of the National Science Foundation, a detailed procedure has been prepared, and concurred in, for the evaluation of applications for grants and contracts and of proposals for research and development work. The procedure provides for the successive screening, review, approval, and clearance by designated panels of research organizations or individuals, and approval by the Secretary of the Interior. Initial examination will be by the small technical staff of the Coordinator's office. Selected proposals will be referred to one or more consultants recognized as specialists in the several fields of investigation. Consultants may recommend additional reviewers, more highly specialized in the applicable field. Evaluation reports by consultants will be reviewed for final recommendation by the Coordination Office, with the assistance of qualified representatives of the Bureau of Reclamation, Bureau of Mines, the Geological Survey, or other appropriate Government agencies. Close cooperation will be maintained on all approved projects with the National Science Foundation and the Department of Defense in order to avoid any unnecessary duplication. Groups of proposals will be submitted to the interagency committee for information and comment and coordination with related work in other agencies. Likewise, groups of applications, reports of evaluations, and recommended priorities will be submitted to the advisers to the Secretary for their information and comment. Approval by the Secretary is the final step.

Contracts and grants

More than 100 organizations and individuals have expressed a desire to perform research and development in this field; already over 20 have requested immediate opportunity to submit specific applications, and about half of these have made their proposals sufficiently specific to indicate the presence of meritorious proposals. One grant to the University of California has been approved, and three other proposals are being evaluated or negotiated at present. This research consists of consideration of permionic membranes utilization on brackish waters, solar still, waste-heat plants, temperature-difference plant, new-design evaporator, ion-selective membranes and ion-exchange resins, theoretical study of practical efficiency limits of various processes, survey of brackish waters of South Dakota, and possible investigations of geothermal energy.

The four research projects will consume the $50,000 available for this purpose from the current appropriation of $125,000. Requests for $275,000 supplemental fiscal year 1953 appropriation and $400,000 regular fiscal year 1954 appropriations have been made.

Interest

Public interest in this program is apparent as evidenced by the great number of inquiries and correspondence already received prior to the distribution of the brochure. Replies have been sent to more than 300 such letters from individuals, research organizations, and industrial firms. In addition, numerous visits have been made by individuals and various group representatives who desired to make suggestions or to learn the purpose and scope of the program so as to ascertain the best way in which they could cooperate in the research and development. The total correspondence pertaining to the demineralization of saline waters, including that prior to enactment of the legislation, is now more than 600.

Technical developments

Many of the developments on demineralization of saline waters completed or in progress during consideration of legislation were reported in the subcommittee hearings on S. 5, 82d Congress, 1st session. Subsequent to the enactment of Public Law 448, developments were summarized and briefly discussed in the compendium Demineralization of Saline Waters (appendix 1). Further technical developments in the solution of the problems during the few months which have elapsed since then have not been extensive. However, a few of these are of sufficient importance to warrant comment in this report.

1. Use of membranes possessing ion selective permeability in electrochemical processes.

Under a consultant-type contract with the Bureau of Reclamation, one firm has demonstrated the use of its demineralization cell (which was designed for a different purpose entirely) in the reduction of salt content of brackish water. Using a small cell of 40-gallons-per-hour capacity, it has demonstrated the laboratory feasibility of reducing a brackish water, such as that from the Shadehill Reservoir in South Dakota, from a total salt content of 800 parts per million to 200 parts per million by this continuous process. It has obtained data on the operation of the cell and has investigated process variables in its operation. Extrapolation of data to large-scale brackish-water processing for irrigation use in an economic analysis led to the conclusion that water of this type, and sea water as well, might be reclaimed at relatively low cost in a larger cell designed for that specific purpose.

Much work remains in the testing of these conclusions on a larger scale unit and to obtain data as to the effect of sediment and micro-organisms present in the feedwater upon life of the membranes and cell operations and such other operation data not possible on the very small unit. Additional development is necessary in the improvement of the cell-operation efficiency to lower water-processing costs on cells designed specifically for demineralization of brackish and sea water. It is to obtain data such as this that a contract has been negotiated.

At least one other firm has continued research on permionic membranes. That firm has under way a basic research program on membranes from ion-exchange resins prior to development of separation applications. It is expected that the application to saline-water demineralization will require some Government financial support.

International activities

The Central National Council for Applied Scientific Research in the Netherlands (General Technical Department) has published a report on a survey of water-desalting investigations and includes results of their studies of membrane applications. Based on these studies, a recommendation was made for the construction of a multicompartment apparatus with selective membranes. A tentative cost calculation on a sodium chloride reduction from 1,650 milligrams per liter to 500 milligrams per liter at a 48,000 cubic meters per day rate is 0.37 florin per cubic meter. In other terms, this would be a reduction of about 1,650 parts per million to 500 parts per million at a cost of $0.363 per thousand gallons, or $118.30 per acre-foot in a 12.7-million-gallons-per-day plant. It was stated that further cost reduction seems possible (assuming 1 florin equals 26 cents).

Mention was made in the brochure of the thermal-difference plant under construction at Abidjan on the Ivory Coast of French West Africa with a designed capacity of 10,000 kilowatts and 150,000 gallons of fresh water per day. Informa-

tion has been received that operations in testing the laying of the intake piping will take place from January to March of 1953. The cost of these operations is given as 200 million francs ($500,000).

The Advisory Committee on Arid Zone Research has recommended to the United Nations Educational Scientific and Cultural Organization that, during the next year, a survey of utilization of salt water be carried out. It is proposed that four reports on various phases of this problem be prepared.

The United States delegation to UNESCO was authorized to concur in this proposal and requested to urge UNESCO collaboration with the United States program.

Among foreign countries which have either expressed an interest in the United States program or which might be willing to collaborate with the United States in some way are Saudi Arabia, Jordan, Israel, Syria, Lebanon, and Libya.

A subcommittee for cooperative research on the demineralization of brackish waters was formed under the auspices of the Organization for European Economic Cooperation of the Mutual Security Administration during the summer of 1952. This working party consists of representatives of the Netherlands, Belgium, France, Germany, and the United Kingdom. The Secretary of the Interior was invited to send a representative to a meeting of the working party in November 1952 at The Hague. Due to brief notice, it was impractical to accept the invitation. Another conference is scheduled for early in 1953. It is planned that a representative will attend that meeting.

Department of Defense

In accordance with the provisions of Public Law 448, research and development work in this program is being coordinated with that in the Department of Defense.

There are a number of current military developments in progress on the demineralization of sea water. These developments have objectives in accordance with the specific military problems and needs of the sponsoring military office. Military considerations are of paramount importance as contrasted with objectives of the saline-water program in which the cost of water produced is the primary consideration. The reported current developments are mentioned but briefly in this report since details are available in reports of the Department of Defense.

Corps of Engineers.—Portable vapor-compression distillation units under 500-gallons-per-hour capacity are being developed.

Studies of methods of scale elimination in vapor-compression distillation units is being completed. An effective means of scale control has been developed.

Bureau of Yards and Docks.—Several developments are in progress to improve the efficiency of vapor-compression distillation units in 85-gallons-per-hour to 400-gallons-per-hour sizes.

Bureau of Ships.—Nine procurements or contracts are now in effect relating to the fresh-water-from-sea-water problem. All of these deal with a variety of evaporator or compressor improvements except 1 for the development of a 15-gallons-per-hour prototpye membrane unit for special shipboard use. In this case, reduction of space and noise is of greater importance than water costs.

The developments in distillation equipment includes production of evaporators up to 50,000 gallons per day capacity.

Naval Civil Engineering Research and Evaluation Laboratories.—A cooperative research program of the University of Minnesota, Department of Mechanical Engineering and United States Naval Civil Engineering Research and Evaluation Laboratory under Navy contract resulted in publication of a report (August 1952) on study of water recovery methods and equipment. The report is an extensive review of literature and patents pertaining to the subject.

Bureau of Reclamation.—Apart from the saline water program and in connection with its investigations of a means of improving authorized and operating reclamation projects, the engineering laboratories of the Office of the Chief Engineer of the Bureau of Reclamation have made preliminary laboratory studies of processes which might be suitable for removing small quantities of salt from the water of the Bixby and Shadehill units of the Missouri Basin project in South Dakota. One of the most encouraging results lies in the field of demineralization by means of freezing. A plan wherein the low winter temperatures prevailing in South Dakota would be utilized in freezing sufficient water for a year of irrigation has been given considerable attention.

University of California

As noted in the brochure, the University of California has established a research program to obtain information on demineralization of water by three methods—multieffect distillation using waste heat; temperature difference, and solar distilla-

tion. The status of this program as of June 30, 1952, when a $30,000 State of California appropriation was exhausted, is listed below:

1. *Waste heat plant.*—The objective is to investigate probable costs and to measure performance under different conditions so as to determine feasibility of a combination of sea-water distillation and waste heat from power-generating plants.

2. *Solar still.*—The five small units are in operation. The objective is to establish performance efficiency and costs of plant per unit produced under varying conditions of weather and water temperatures.

3. *Temperature difference plant (laboratory size).*—Plant is complete except for dynamometer for turbine. Operation of this laboratory plant with an estimated capacity of 1.6 gallons per minute will permit study of problems in air removal, evaporator and turbine design needed for construction of pilot model. An estimated 3 months is required for design and construction of the dynamometer and to conduct performance tests.

The first Federal grant under the saline-water program of $5,000 is being made in order to complete item 3, to conduct performance tests and to continue observations and measurements on items 1 and 2.

SUBMISSION OF REPORTS ON PROGRESS

Mr. NORRELL. I am very much interested in this project. I know that it is a long-range program, and I am not critical of the program at all, but I do think as we go along the record ought to show the actual results obtained from year to year.

Mr. JENKINS. The act itself requires that those reports on the progress made shall be submitted to the Congress and the President at the opening of each session.

Mr. NORRELL. You will include in the record the progress that has been made during this fiscal year?

Mr. JENKINS. Yes, sir; that progress was reported early in January, and will be made a part of the record.

BREAKDOWN OF BUDGET REQUEST

Mr. NORRELL. Referring to this $400,000 that you are asking for, I take it that only 10 percent will be allocated to schools and colleges which make those studies?

Mr. JENKINS. No, sir; about 10 percent will be used for grants.

Mr. NORRELL. On page 10 of your justifications the first item shown is personal services, $85,160. Is that here in the Interior Department?

Mr. LINEWEAVER. Yes, sir, that would be primarily in the Interior Department, and part of it for the Bureau of Reclamation Laboratory in Denver, and the Bureau of Mines and the Geological Survey.

Mr. NORRELL. They are interested in coordinating the information that is obtained from the several agencies in the field?

Mr. LINEWEAVER. That is right, sir.

Mr. NORRELL. Now, on the item of travel. I assume that is to enable them to go wherever they might need to go, which is, of course, reasonable. Next you show an item of $300 for communications and $2,000 for printing. Next is a substantial item of $240,000 for "other contractual services." What are contractual services?

Mr. JENKINS. Those services are the contracts and grants that we make.

Mr. NORRELL. With schools and universities?

Mr. JENKINS. And private industries, yes, sir.

REASONS FOR BOTH CONTRACTS AND GRANTS

Mr. NORRELL. What is the difference between a contract and a grant?

Mr. JENKINS. There is considerable difference between a contract for research and a grant.

Mr. NORRELL. What is a grant; is it not to do the same thing?

Mr. JENKINS. A grant contains less stipulation as to what shall be done. In the case of a grant we depend upon the integrity and the experience of the organization.

Mr. NORRELL. What is the necessity for having grants; why do you not have all contracts?

Mr. JENKINS. It could be all in contracts, but some organizations prefer to operate on grant basis.

Mr. NORRELL. I think the whole item ought to be under contracts. I do not see any reason why the University of Arkansas, in my State, or the University of Idaho, in Idaho, or any other university should get a grant. In consideration of the fact that it is Federal money they ought to have a contract to do the certain work as indicated by the Federal Government.

Mr. JENKINS. We just have to find research services wherever they can be had. If a man who can solve this problem happens to be working in a school that prefers grants we would like to get him to work on this subject, and if it is a good school we feel that a small amount of money ought to be placed there.

Mr. LINEWEAVER. Is not this a fact that the provisions of the grant we made to the University of California were almost as explicit as a contract would have been as to what they were expected to do?

Mr. JENKINS. Yes, in that particular case they were.

Mr. NORRELL. Is it true that the reason you have grants is because some institutions are not able to make any contribution toward the study of this program and maybe they take this grant and use it in order to get started in this research work?

Mr. JENKINS. If I understand your question we would not entertain such a proposal. I should say, though, that with respect to grants that quite often it is entirely impossible to stipulate various things that will be done in a research job. Sometimes the researcher simply does not know what will be done and in such cases the overall objective is stated in a grant.

Mr. NORRELL. Let me ask you this in conclusion: actually, the money that is earmarked for grants, and the money that is earmarked for contracts, is money that goes into experimentation on this matter and not money that is necessary to coordinate it?

Mr. JENKINS. That is correct.

BUREAU OF RECLAMATION'S PART IN PROGRAM

Mr. FENTON. The real idea of this program is to get what kind of water? Is it just to get drinking water or is it to get water for the Reclamation Bureau?

Mr. JENKINS. The act itself provides that the water shall be for irrigation, industrial, and municipal purposes.

Mr. FENTON. Has not the Reclamation Bureau had plenty of time with their vast organization to have done this job, to find irrigation

water, with all of the billions of dollars that they have spent? I am perfectly in sympathy with finding good potable drinking water, but I am not in sympathy with supplementing an already existing Bureau like the Bureau of Reclamation under the guise of this kind of a project.

Mr. JENKINS. It is my understanding that all of the appropriations to the Bureau of Reclamation are made for a specific purpose, a project here or there, or some other specific purpose. The Bureau felt 2 years ago that it had authority to conduct this type of work, and it submitted a request for, I believe it was $500,000 for this job, and I think it was this committee that determined that the Bureau did not have that authority, and would have to get the authority which was done during the past 2 years.

Mr. LINEWEAVER. I would like to submit just a brief historical statement on that, Dr. Fenton, if you would like to have me do so, on just how this came about and why this legislation was necessary.

Mr. FENTON. All right.

Mr. LINEWEAVER. And also the reasons why we think that this is not purely and wholly a reclamation job.

(Information requested is as follows:)

On October 11, 1949, a hearing was held by the Subcommittee on Interior Appropriations, House Appropriations Committee, on a supplemental estimate of $500,000 for instituting a program for the utilization of salt water in connection with a supplemental estimate of $500,000. The committee in its report No. 1439, 81st Congress, 1st Session, stated:

"*Utilization of salt water.*—A supplemental budget request was considered for $500,000 to enable the Bureau of Reclamation to initiate during the fiscal year 1950 a program of laboratory investigation for development of economically feasible means of producing fresh water from ocean or other saline waters. Although such a developmental program, if successful, might well be of far-reaching benefit to the Nation, this new activity is not authorized by law. Proposed legislation has been introduced in both Houses of Congress, but enacted, to authorize such activity. The committee would be willing to consider an appropriation for such a meritorious endeavor after authorizing legislation has been provided. However, owing to the absence of legislative authority, the committee recommends denial of this request."

As a result of this action by the committee, subsequent legislation was proposed in both Houses of Congress and Public Law 448 was enacted at the closing session of the 82d Congress.

Mr. FENTON. How much money is being channeled out to your laboratory at Denver?

Mr. LINEWEAVER. On the research program?

Mr. FENTON. Yes.

Mr. LINEWEAVER. About $15,000 this year.

Mr. FENTON. Has the Bureau of Reclamation done some work on this?

Mr. LINEWEAVER. In reclamation work, Dr. Fenton, as Mr. Jenkins stated, those funds are appropriated for specific purposes. There were no funds appropriated for experimental work in the demineralization process, which is more immediate than the long-range program of desalting sea water.

Mr. FENTON. We are interested in drinking water, because water out in the West is getting scarce for even drinking purposes. Are we going to go along in this program of working toward irrigation water and then quit, or are you going to keep up with the program to find out how to make water suitable for drinking?

Mr. LINEWEAVER. Yes, sir, for human beings and also for industrial purposes. There is where the interest of General Motors comes in. General Motors is interested in it for industrial purposes and the purification of water for industrial purposes, not only in the West, but throughout the country, wherever they are located. That is the industrial phase of it. And, as Mr. Jenkins explained, the act required it for domestic, as well as irrigation, purposes and industrial purposes and other beneficial, consumptive uses.

Because the human consumption is most important and, if you do not have the water for people you just are out of luck.

Mr. FENTON. I believe you have a mandate from Congress on the issue and I certainly do not want to see this organization that has been set up dominated by any other organization. Let them do the job themselves, let them be a separate entity and let them really go to work. I have advocated this for a very long time and I certainly think that is the way it should be handled.

Mr. LINEWEAVER. Yes, sir; I recall 3 or 4 years ago you were interested in it.

FEBRUARY 24, 1953.

FISHERY RESEARCH

WITNESS

ALBERT M. DAY, DIRECTOR, FISH AND WILDLIFE SERVICE

Amounts available for obligation

Appropriation or estimate (obligations incurred), 1954 ..... $260,000

Obligations by activities

Research on fish and fisheries, 1954 ..... $260,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions			22
Average number of all employees			17
Average salaries and grades:			
General schedule grades:			
Average salary			$4,700
Average grade			GS-7.5
01 Personal services:			
Permanent positions			$83,705
Regular pay in excess of 52 week base			398
Total personal services			84,103
02 Travel			8,897
03 Transportation of things			1,000
04 Communication services			1,000
05 Rents and utility services			3,000
06 Printing and reproduction			5,000
07 Other contractual services			150,000
08 Supplies and materials			1,000
09 Equipment			6,000
Obligations incurred			260,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Obligations incurred during the year			$260,000
Deduct unliquidated obligations, end of year			35,000
Total expenditures out of current authorizations			225,000

GENERAL STATEMENT

Mr. JENSEN. We have before us Mr. Day, the Director of the Fish and Wildlife Service, who is asking for $260,000 for fishery research. Tell us about it, Mr. Day.

Mr. DAY. Mr. Chairman, before discussing this, I would like to introduce the new Assistant Director of the Fish and Wildlife Service, Dr. John L. Kask.

Mr. JENSEN. We are glad to have Dr. Kask with us.

Mr. DAY. Gentlemen, we have a rather general discussion of the aims of this request, which I would like to have, with your permission, inserted in the record, being pages 12, 13, and 14 of this submission.

Mr. JENSEN. Without objection, it is so ordered.

(The statement referred to follows:)

The Pacific salmon are among the most valuable species of commercial and sport fish in the world. Among living animals they are also among the most delicately adjusted to their environment. They not only find their way from the open ocean to their parent stream, but go to the identical tributary and approximately the same gravel in which they were hatched to lay their eggs. At times this takes them many hundreds of miles up a river. They no longer feed on the spawning migration and have stored energy only sufficient to carry them to their native stream and to spawn. After spawning, they die. They cannot adapt themselves successfully to requirements very far beyond these.

The building of each new dam on the Columbia River not only adds to the difficulties and energy expenditure of salmon in ascending the river, but creates new and greater dangers for the young fish as they slowly drift down the river over the dams on their way to the sea. Added to this is the radical change in environment which is brought about by changing a fast-flowing river into a series of sluggish lakes. This floods and silts up spawning beds, reduces the current which guides the fish upstream, and may well create warm-lake environments harmful to salmon but well adapted to the salmon's chief predators and competitors.

Past experiments and experience have shown that adult salmon can successfully negotiate a dam the height of Bonneville (65 feet) by using the carefully planned and constructed fish passageways. These fishways cost $7½ million. Adult fish continue upstream through Bonneville Lake where the current is much reduced, and the young fish pass over the dam and through the large turbines with some, but not excessive, loss on their way to the sea. What will happen when they are faced with four dams up to 100 feet in height now under construction or authorized in the lower Columbia, and the many high and low dams either authorized or planned in the upper reaches of the Columbia and its tributaries, no one definitely knows. Due to the value of these fish runs to the fishing industry ($20 million annually) and the sport fishery, with unknown but great real and esthetic value, and because of the great investment (about 7 to 10 percent of the total cost of the dam) in fishways and other devices which will be called for to meet these developing events, it becomes imperative that further knowledge of the cumulative effect of these dams on the fish be obtained.

There are presently under way small programs of research on various biological phases of this problem by the Service and the States. Also, the Corps of Engineers has organized a program of investigation, in which the Service participates, with the ultimate view of shedding light on the efficiency of fishways and how their construction can be improved and made more economical. The main biological answers are still wanting. The appropriation of $260,000 is requested for the purpose of initiating new programs or strengthening programs now under way.

With dams in the lower Columbia now under construction, time is of the essence. Only this knowledge can guide future policy as to whether fishways and other facilities will continue to be effective, and much of the experimenting will take considerable time.

The approach to this problem will be undertaken by both engineering and biological studies. It is planned that scale models will be constructed of various devices where the reactions of live fish can be tested. There is some evidence that entirely new approaches on fishway design may be successful, but until pilot models are constructed and tested, there is no definite proof of either success or failure. Tests of various types of facilities must be made, and these will require detailed engineering plans and the construction of facilities. It is entirely possible that some of the newer devices under consideration may save large sums of money over the cost of construction of present-day fish ladders. Much more work needs to be done on electronic devices to test the possibility of guiding downstream migrants either through suitable openings in the face of the dam or into fish ladders. Present tests have been confined to small tanks and pools. Research must be conducted on a large scale to determine whether fish can be collected from the upstream side of a dam a mile or more long and guided into small passageways. Tests must be conducted to find out at what depth downstream migrants can be induced to come to the surface for collection into the downstream passageways.

Other research will involve:

1. The measure of the delays in migration caused by the accumulation of dams and impoundments. This will involve measures of the rate of migration through the lakes (by tagging fish at the fishways) as well as the time of holdup below the dam before the fish enter the fishway.

2. Measures of energy expenditure of adults in ascending ladders of varying heights. If a fish dies exhausted before spawning, it might better have been caught and put in a can. This will require the building of model fishways in appropriate areas.

3. The study of means of guiding the young fish into fishways and bypasses on their way to the sea. The cumulative effect of young fish falling over increasingly high dams or going through the turbines might make the expensive effort of getting the adult fish upstream useless. This is one of the very important items on which expanded research is necessary. Some progress has been made on the laboratory scale in herding young fish in front of an electric field. Also sound, light, and other physical impulses are being experimented with. Scale models in the field are needed to carry these experiments to perfection.

4. Biological study of changes in impounded areas. The lakes created by dams bring about changes in environment. Experience in other areas has shown that great changes occur in the kinds and numbers of fish. The new environment becomes increasingly less suitable for salmon and more suitable for the enemies and competitors of the salmon. This is important to hatchery-raised fish as well, which are promptly eaten up by predators when the young salmon are released. The effects of this change may be sufficiently important to make the difference between success and failure.

5. Study of other uses of impounded waters. If salmon will not thrive in these waters, to what other uses can these extensive waters be put to compensate for the loss of salmon? Trout production, bass production, etc., are possibilities.

CONFLICT BETWEEN POWER AND FISH

Mr. DAY. Beyond what has been submitted, I would like to enter into some additional discussion, because while this is an important program, and one that has been carried on cooperatively between the Government and the States for some little time, we have previously justified the lower Columbia River fishery development program before the Civil Functions Committee and have not been before you with any of these particular problems.

I have here copies of maps, which are duplicates of the map hanging on the wall and I should like to illustrate the problem briefly, if I may, with the map.

In the Columbia River Basin the salmon and steelhead industry, for commercial and sport fisheries, is worth about $20 million per

year and at the same time the Columbia River is one of the greatest power potentials on the North American Continent. The Columbia is a long fast river with many excellent sites for power dams, a great fall from the mountains to the ocean where it discharges a plentiful supply of water. It so happens that that kind of stream produces the valuable salmon resource while it is also highly important from the standpoint of power production.

So, we have had a head-on conflict between power and fish for some time.

Now, power dams that have already been built in years past have eliminated production from most of the waters in the area above the brown line on this map, which constitutes about 62 percent of the total Columbia River watershed insofar as salmon and steelhead are concerned.

The Grand Coulee Dam, which is some 500 feet high, cut off about 1,100 miles of salmon stream above that point. To compensate for this loss, hatcheries were constructed, waters were cleared and replanted, and the fishery was restored in other streams which empty into the Columbia River below Grand Coulee.

Existing dams that are now being constructed or others that are proposed above the McNary Dam site, indicated on the map by the yellow crossline, will reduce salmon and steelhead productivity, perhaps substantially, in another 24 percent of the watershed. So, that leaves only 14 percent on which we may attempt to repair the losses that are in sight from the dam construction program on the planning boards.

AUTHORIZATIONS AND COST OF PROGRAM

The Congress in 1938 and again by amendment in 1946 passed special acts designed to salvage as much as possible out of this fish and dam conflict by providing for the construction of fishways or ladders over falls and dams, the screening of irrigation diversions and building of hatcheries. This is known as the lower Columbia River fisheries development program. It was a good plan, and it was estimated at that time that it would cost some $20 million over a period of 10 years. This sum was to build the facilities that would mitigate to some extent salmon losses resulting from upriver dam construction. Funds have been provided to accomplish this plan beginning in 1949.

The Congress has approved as a part of the civil-functions appropriations since 1949 better than $9,600,000. The budget for 1954 in the civil-functions bill contains $4,820,000 for the continuation of this Lower River program. We originally estimated it would cost about $20 million, but the cost will probably reach approximately $25 million under present rates.

This is a strictly cooperative program with the States of Washington and Oregon. Federal funds are turned over to the States to supplement their own funds to build hatcheries and to clear streams for the improvement of spawning conditions.

NEW PROJECTS CREATING MORE PROBLEMS

The plans were to keep the streams below McNary Dam primarily as fish-producing areas. Both the States of Washington and Oregon have legislative enactments to facilitate and carry through the lower Columbia program. However, the demand for power has been so great in the Northwest that we now see the lower Columbia development program being definitely endangered.

The city of Tacoma, for instance, wishes to construct two dams on the Cowlitz River, which is the most important single fish production stream in the lower region. They would like to build two dams, one the Mayfield, 180 feet high, and the other the Mossyrock, 350 feet high. These the fishery interests feel would probably eliminate the salmon spawning beds above those sites.

Also a power company in Portland, Oreg., has requested authority for the construction of Pelton Dam on the Deschutes River in Oregon which would be 150 feet high, and that is another important river. Both the State Fisheries Departments and the Department of Interior have opposed these projects. Former Secretary Chapman is on record in opposing both of them, yet the Federal Power Commission granted licenses to proceed with the construction of these dams, which are in direct violation of the fishery plans which have been conceived for the lower region.

The sponsors of the Cowlitz Dams stated very frankly that they would construct any kind of protective device that fishery interests could describe. They said they would spend $9 million or more if we wanted them to and would build any device we would suggest to get the fish through this 350-foot dam. All we had to do was to tell them how to do it. And, that is where we ran into real difficulty, because we do not now know how to accomplish that feat. The Bonneville Dam is 60 feet high. We have had experience at Bonneville and similarly at Rock Island of about the same height but our experience is limited so far to dams of 60 feet on the main stem of the Columbia. So, we were unable to tell them what to do to get fish over, through, or by obstructions six times as high. They suggested all kinds of devices, such as compression chambers and decompression chambers, which they said they would build into the dam, and on paper it looked like it might work, but no one has ever had the experience to know whether it actually would succeed. We feel that the fishery is so valuable that we could not take that chance. So, we disapproved the idea. We find ourselves lacking adequate knowledge to enable us to answer these questions, even though the construction agencies are perfectly willing to include funds for fish facilities if we can tell them what to construct.

We have good information on the passage of adult fish up and over dams. We know how to build entrances to fish ladders that will quite successfully attract fish into the ladders and the construction agenies have always been willing to budget required funds for fishways. At Bonneville they spent $7½ million, at McNary they included more than $23½ million and at the Dalles Dam, more than $31 million for fishways and fish facilities. At the Dalles Dam they have included almost 9 percent of the total cost of the dam to handle this problem.

The pressure for power and the actions of the Federal Power Commission in attempting to meet these needs has made it evident that our original approach of making the lower Columbia a fish sanctuary may be inadequate. Now we must find additional answers than those contemplated in the original lower river program. We must take a new look at the situation.

The Columbia River Basin Interagency Committee, which is made up of various Federal and State agencies in the basin, have studied this problem for a long time and they recommend that we try to find some means of having both fish and power, if possible. Our chief problem is to get the fingerlings back through or over the dams.

CONTRIBUTIONS OF OTHER AGENCIES

Following studies and recommendations by the Interagency Committee, I called a meeting in Seattle in 1951 to see if we could work out a coordinated research approach to that problem. All the interested State agencies were there together with representatives of the Corps of Engineers, the University of Washington, and the International Pacific Salmon Fisheries Commission and British Columbia fisheries officials. We tried to work out and develop an integrated program of research on this complicated problem.

We appointed administrative and technical committees and I came back from this meeting and attempted to secure authorization from the Bureau of the Budget to carry forward and requested the funds to put the plan into effect.

For fiscal year 1952, we presented a program which we estimated might cost as much as $11½ million over a period of 10 years. This sounds large, but it would still be only one-third of the cost of a fishway for getting the fish up over the Dalles Dam. Yet the Bureau of the Budget failed to go along with it. We tried it the next year and we were still unsuccessful in fiscal year 1953.

During that interim the Corps of Engineers, because of the pressing problem, has so far this year set up $75,000 for carrying on some studies in this connection. The States of Washington, Oregon, and Idaho, and the University of Washington, as well as the Fish and Wildlife Service and the Corps of Engineers, are cooperating in trying to find some answers with these funds.

The Sockeye Salmon Commission is putting in $25,000 and the Fish and Wildlife Service is putting in about $70,000. Yet, with these combined efforts we are not beginning to scratch the surface.

We should not continue to be in this position. To illustrate, funds for the construction of the Ice Harbor Dam, which is the first dam on the Snake River and just above the yellow line on the map, have been refused by the Congress on four different occasions, largely because of the fact that we could not say categorically that the fish runs can be preserved above Ice Harbor. The Snake River is the most important stream in the upper reaches of the Columbia and the four dams Ice Harbor, Lower Monumental, Little Goose and Lower Granite, fishery people feel may endanger the runs that must pass these dams to reach the spawning beds of the Salmon River.

Now, the Bureau of the Budget has indicated a willingness to go along with a start on a program to do more research as an aid to future planning. This item of $260,000 includes some $80,000, or better, for

personnel. With this additional staff we would attempt to secure advice from the States and any other source available and to pull together a planned and conducted research program The balance is for contractual services.

NEED FOR MODEL PILOT PLANT

What we hope to do, if this program is authorized by the Congress, is to use the staff to do the best job possible in developing a model pilot plant where we might test the reactions of fish under controlled conditions. At the present time, all we can do is to try and find out how many fish are injured or die in going through the dams. By this approach, a large number of little fellows are fin-clipped and liberated above the dam and the same number are fin-clipped and turned loose below. Then we wait 4 or 5 years until they come back from the ocean and try to assess the losses by the recovery of the marked ones that were released above and below the dam.

ELECTRONIC DEVICES

We feel it is highly urgent and important that instead of taking this indirect approach, a facility be constructed, preferably at Bonneville where there is already a successful fishway and where large numbers of fish migrate over the dam, to build an experimental plant, where fish could be studied in the course of their natural migration.

People in our laboratories have already developed electronic devices, with the aid of electronic engineers, where fish can be guided in shallow tanks, perhaps as long as this table. I have watched it operate. You can, by turning one knob on the electrical machine, run all the fish from one end of the tank clear down to the other end, then you can turn the knob the other way, and they will turn around and go back. We spent $15,000 for this machine, but it is a small-scale model. Now, we need to find out about the reaction of fish in running, swift water instead of a shallow tank. We need pilot-plant tests. We need to know how much electricity fish can stand without injury. We need to know more about sonics. We need to know the responses of the migration urge of fish through swift waters and through slack waters and under muddy, turbid conditions. We need a place where we can test these things and work out answers under controlled conditions.

What we have here is not planned to compete with anything that the corps is financing. We hope that the corps will continue with what money they can get together and that the States will continue with their programs. An adequate total approach is one which no group has been able to finance as yet, still we all must try to see if we cannot get some basic biological answers to these problems so that we can do a more intelligent job of designing these fishways and ladders. Perhaps we might come up with ideas and plans that would reduce the cost of fishways. We might even in a few years be able to recommend devices which would be only a fraction of the total cost of this whole program, which would do the same kind of a job we must recommend now, and I might say that the answers which would be found are applicable not only to the Columbia but for all streams from Alaska to California, because the habits of the Pacific salmon are very much the same. The fishers' interests must face it on the Fraser River in

Canada. Power dams are proposed in Alaska and we are going to be faced with the same problem there, yet we do not have the basic knowledge that we need.

PERCENTAGE OF FISH PRODUCED ARTIFICIALLY

Mr. JENSEN. What percentage of the fish are hatched by artificial methods, compared to the natural method in these areas that are a problem to you today? Do you have any estimate of that nature?

Mr. DAY. We do not on the Columbia. We have pretty good evidence on the Sacramento River where the big Coleman hatchery is located below Shasta Dam in northern California. Up there the fish are produced artificially and released and as I recall the figure, subject to correction, I think 26 percent of the total commercial catch in 1948 in the San Francisco Bay area was from fish raised in that hatchery on the Sacramento.

POSSIBILITY OF SUSTAINING FISH RUNS WITH HATCHERIES

Mr. JENSEN. If you remember, when we were at that hatchery, we talked about this problem of the destruction of small fish when they go through the penstocks of these dams and at that time I made a suggestion which may or may not have been good, but I asked you why you did not transport these small fish that you hatch in that hatchery to a place in the river below the dam. By so doing, they would not be destroyed in going through the penstocks. That question has never been answered to my satisfaction.

Mr. DAY. There are several basic reasons. We could with the hatchery located here above Bonneville [indicating]. We could truck the fish down and turn them loose below Bonneville. If we would attempt from a hatchery in the upper reaches of the river systems to bring them down, you probably would have a large loss in transportation, because you lose fish in transporting them any great distance. Then, we are faced with this problem of dams all the way up to the headwaters. I think we might be able to find means other than hauling. We might find means of guiding fish into apertures which might be constructed in the dams to allow the fingerling fish to go back down and through.

Mr. JENSEN. The big problem is to get the big fish to go back to their spawning place every 4 years and to get them back up over the dam safely. That really is your big problem.

Mr. DAY. No, sir. We have fairly well solved this business of getting the fish up and over the ladders. Our problem is getting the little fellows back down through the turbines. The principal experience we have had is at Bonneville. We know from our experience there that a certain portion can go down and through the machinery at this 60-foot dam, but when you get a 150-foot dam, would those same fish go down and through and not be killed?

Mr. JENSEN. Would it be possible to transport the eggs down below the hazardous dams and have a hatchery in that area to hatch these fish and turn them loose below these dams?

Mr. DAY. Well, some of that can be done, but not to continue a fishery of the extent that is necessary, to maintain the industry.

Mr. JENSEN. I cannot understand why. Certainly it would not be too much trouble to transport eggs, if you can transport them without destroying them, for most any distance.

Mr. DAY. No, sir. Eggs must lie in the gravel over the winter before they are ready to hatch, and there are not enough streams with suitable gravel beds below Bonneville to maintain the fishing on that basis.

Mr. JENSEN. You could find something that would take the place of gravel, could you not?

Mr. DAY. No, sir.

Mr. JENSEN. You cannot?

Mr. DAY. No, sir, there must be natural gravel.

Mr. JENSEN. Have you ever tried it?

Mr. DAY. Yes, and over many, many areas where fish have been planted in areas of mud bottoms they will not survive.

Mr. JENSEN. I still think there is a possibility that you can either transport the small fish or transport the eggs below this series of dams. I cannot help but think that that is the answer, Mr. Day.

Mr. DAY. It has been experimented with, but not successfully.

Mr. JENSEN. If you let these little fish go through the turbines naturally, you are going to have destruction of fish. As I understand it, you are attempting to make a passageway other than the turbines—a passageway for the water—and then attempting to guide the minnows into that free passageway to get them down below the dam, is that right?

Mr. DAY. That is what we are hoping to develop.

May I point this out, Mr. Chairman, that there are both State and Federal hatcheries in the States of Oregon and Washington. There are hatcheries on virtually every stream having suitable water in the lower portion of the Columbia River. There is no more suitable water for this purpose and I am sure that it would be economically unwise to attempt to raise fish in hatcheries to liberate and try to maintain the fishery, which is worth at present $20 million a year.

Mr. JENSEN. It is a very important industry, and we certainly do not want to do anything to destroy that great industry on which so many people depend.

Mr. DAY. That is right.

OTHER FUNDS REQUESTED FOR SAME PURPOSE

Mr. FENTON. This is the first time you have brought in a request of this kind; is it not?

Mr. DAY. That is right, Dr. Fenton.

Mr. FENTON. Why do we have this item set up separately in the Secretary's office?

Mr. DAY. That I cannot answer. For 2 years we attempted unsuccessfully, as I stated, to secure funds through the Bureau of the Budget. This year they decided that they would go along, but decided to put the item in the Secretary's office for reasons which are unknown to me. Perhaps Assistant Secretary Beasley can answer that question.

Mr. FENTON. Well, of course, this activity appears in the 1954 budget request; does it not?

Mr. DAY. Some in our regular bill. We will justify $70,000 that is now being spent from regular appropriation when we are heard later. It will be tied in completely.

Mr. FENTON. You are asking for $274,471 in the regular bill.

Mr. DAY. That is for all salmon fishery research.

Mr. FENTON. For salmon and related fisheries, $274,471.

Mr. DAY. That includes alaska. The studies we do there amount to something like $200,000.

Mr. FENTON. Then there is $70,000 included in the regular appropriation for this purpose?

Mr. DAY. Yes, sir; approximately $70,000.

COOPERATION OF STATES

Mr. FENTON. What are the States doing on fishery research? I know they are cooperating, but just what are they doing?

Mr. DAY. As I recall it, the State of Washington is putting in somewhere around $75,000 to $100,000 and in Oregon it is perhaps a similar figure. I just gave those notes to the recorder. I can assure you, however, that it is all a coordinated approach.

Mr. FENTON. How many dams do you have on the Columbia River starting with Bonneville?

Mr. DAY. Bonneville is 60 feet high; The Dalles, which is under construction, 88 feet; McNary under construction, 90 feet high; John Day, which is to be 130 feet high, is only planned for the future. Then there are the Snake River dams—Ice Harbor, Lower Monumental, Little Goose, and Lower Granite—all of which run from 82 to 100 feet high.

Then above is Hells Canyon, which has been under discussion and is planned for 580 feet high. That is higher than Bonneville. Rock Island is already in. The whole river has been surveyed and plans have been virtually made for making it a slack-water stream from Lewiston, Idaho, to Bonneville.

Mr. FENTON. The two States which are cooperating are Washington and Oregon?

Mr. DAY. Yes, Washington and Oregon, and Idaho is cooperating to the extent that they can on fresh-water fisheries.

We figure probably if Hells Canyon goes in there will be no salmon fishery above that because it is similar to Grand Coulee, more than 500 feet high, but we are hopeful that the Snake River will not be taken out of the production picture if suitable fishways can be installed in the lower Snake River dams, because the Salmon River is the most important single stream in the upper Snake watershed.

COLUMBIA BASIN INTERAGENCY COMMITTEE INDORSEMENT

Mr. BUDGE. Mr. Day, has this program been agreed upon by the Columbia Basin Interagency Committee?

Mr. DAY. Yes, the general plan was sponsored by the Columbia Basin Interagency Committee.

Mr. BUDGE. They favor your request for these funds; is that correct?

Mr. DAY. Our request for funds is founded upon a plan that the interagency committee developed in years past. I do not think our specific request here for $260,000 has been cleared with the interagency committee. They are, I am sure, aware of the fact that we have it in the budget and there has been no objection that I have heard. It is proposed that this would be coordinated completely with the other programs, all cleared with the Columbia Basin Interagency Committee.

RIVER AREAS INCLUDED IN PROGRAM

Mr. BUDGE. Why is it that the State of Idaho does not share in your program at the present time?

Mr. DAY. The lower Columbia fisheries program was designed largely for areas below McNary. The original concept was to try to develop the areas and streams from McNary westward. That concept has now been changed by actions of the Federal Power Commission in granting licenses for the construction of dams on the Cowlitz and the Deschutes Rivers.

Mr. BUDGE. Now, referring to this figure of 24 percent of the watershed which you use here on your chart, what portion of that is in the State of Idaho?

Mr. DAY. I do not know, but it would be a considerable part.

Mr. BUDGE. Then why has your program been limited to the area westward of The Dalles?

Mr. DAY. The original concept, as I stated, was for the area west of the middle line, or west of McNary, and that has now been changed because of the falling down of the program in the lower Columbia, and we are very anxious now to see that fishways are put in and that everything that can be done is done to develop and maintain the Snake River runs.

Mr. BUDGE. When you reach this 14 percent figure that you use on your chart, give me an estimate as to how much of that would be in the State of Idaho.

Mr. DAY. Well, the 14 percent represents this area [indicating on map] below McNary. If fishways are placed in here [indicating], successful fishways, so that the Salmon River can be used for spawning, those figures would be changed materially because then this much [indicating on map] could be available for fishery production.

Mr. BUDGE. And the Federal program now in existence and the proposed structures will prevent spawning in the upper Snake River, including the Salmon?

Mr. DAY. If fishways cannot be designed which will take care of the migration of fish through Ice Harbor, Monumental, Little Goose, and the other dams, there is grave danger, with our existing knowledge, that fish can move through the pools which will be created by those four dams to reach the Salmon River. So we are attempting to learn more answers, to see if we can determine that fish can move through there so that the fishery can be protected.

Mr. BUDGE. In what category would you place the Hells Canyon structure?

Mr. DAY. I think Hells Canyon would probably have to be placed in the same category as Grand Coulee because it is so high that we doubt that any fish could be gotten over it. That is according to our present knowledge.

ESTIMATE COST OF TOTAL DAM CONSTRUCTION PROGRAM

Mr. BUDGE. Do you have any information as to what the Federal expenditure would be for construction when this figure is changed from your present 24 percent to 14 percent?

Mr. DAY. I presume you mean the construction of fishways in the dams?

Mr. BUDGE. No, I mean the construction of the dams themselves including the fishways, if they prove feasible, which you have set out

here which would cut you down to a remaining 14 percent of the watershed.

Mr. DAY. I do not have the information as to the total cost of the dams.

Mr. BUDGE. Mr. Chairman, in view of the fact that this request is directly from the Secretary's office, I should like to ask that the Secretary's office furnish the committee with a statement as to the present estimates for the structures envisaged here which would diminish the productivity in the watershed from Mr. Day's figure of 24 percent down to 14 percent of the watershed.

Mr. JENSEN. Without objection that may be included in the record.

Mr. DAY. We can get the information, I am sure, from the construction agencies as to the estimated cost of these structures, but I do not have it.

Mr. BUDGE. I appreciate that you have a very important problem here.

Mr. DAY. It is a problem, as I stated a while ago, that is not only confined to the Columbia, but it is a problem that extends from Alaska to California. What we need, in our opinion, is a coordinated approach with everybody working together through all agencies to find out more about the actual influence of various flows of water, electricity, and other things on fish in a pilot or model plant where we can perhaps save considerable in the way of future expenditures for construction. We might be able to find out that at a certain dam the losses are such that we should not even recommend fishways.

BASIS FOR THE PROGRAM

Mr. BUDGE. In support of your program are you assuming that all of these proposed structures are to be built?

Mr. DAY. I am assuming that they may be built some day.

Mr. BUDGE. Is your program based upon their being built; is that your justification for it?

Mr. DAY. No, not entirely. We need to know much more about the dams that are already under way.

For instance, a salmon in its normal migration has to find his way up over obstructions, through swift, moving water. We are uncertain as to the effect on the migration of salmon after they go over Bonneville Dam, through the Bonneville pool, through the Dalles pool, and through the pool back of McNary. We do not have that information at the present time, so we need basic information actually upon the reaction of a living organism, migrating salmon, to the change from a swift-flowing stream to slack water. We assume, or fear that some of these slack pools will be beneficial to rough fish such as squawfish, predators that feed on young salmon, and we need to measure some of those populations to see whether there are going to be more predatory fish in a calm pool than are found in the normal river.

Mr. BUDGE. In other words, your program is twofold as you are now describing it. You want to find out what the impact has been of actual structures already built and that are now being built, and also you want to try to devise some system of protecting the salmon and the proposed structures?

Mr. DAY. That is right. We need much more basic information on the total problem. We think we can find answers which will help

assess the effects of existing dams, as well as the dams which may be built in the future.

Mr. BUDGE. Mr. Chairman, if that figure which I have requested could be included in the record I would appreciate it.

Mr. JENSON. Yes; without objection.

(The matter referred to follows:)

BUREAU OF RECLAMATION

Cost of all projects in Columbia River drainage basin

	Total estimated cost		Total estimated cost
Boise project, Anderson Ranch Dam	$30,494,286	Minidoka project, north side pumping	$10,509,000
Boise project, drainage	100,000	Palisades	76,601,000
Boise project, Payette division	17,173,000	Yakima project, Kennewick division	12,932,100
Columbia Basin project	754,476,000	Yakima project, Roza division	23,606,000
Deschutes project	12,943,000		
Hungry Horse project	102,900,000	Total	1,048,396,917
Minidoka project, Gooding	6,662,531		

Potential projects under investigation in the Columbia River Basin

PROJECTS WHICH HAVE BEEN RECOMMENDED TO THE CONGRESS FOR AUTHORIZATION

Project	State	Total estimated cost	Date of cost estimate
Bitterroot Valley project	Montana	$8,979,000	May 1949.
Cambridge Bench project	Idaho	544,000	1949.
Canby project	Oregon	961,000	March 1948.
Columbia Basin project, modifications of Grand Coulee Dam for flood control.	Washington	2,750,000	1949.
Council project	Idaho	1,998,000	1949.
Crooked River project	Oregon	6,247,000	April 1952.
Deschutes project, domestic water system	do	4,346,000	July 1952.
Mann Creek project	Idaho	1,949,000	1949.
Missoula Valley project, north side unit	Montana	269,000	1949.
Snake River project:			
Hells Canyon division	Idaho, Oregon	356,810,000	October 1951.
Mountain Home division	Idaho	253,243,000	April 1949.
The Dalles project, western division	Oregon	2,573,000	1949.
Upper Star Valley project	Wyoming	3,892,000	January 1949.
Vale project, Bully Creek extension	Oregon	2,846,000	1949.

OTHER PROJECTS UNDER INVESTIGATION

Baker project, upper division	Oregon	$4,676,000	1951.[1]
Big Wood River project	Idaho	(2)	
Challis project	do	[3] 4,330,000	1948.
Chief Joseph project:			
Bridgeport Bar, East Canal, and Shoreline pumping divisions.	Washington	[1] 5,176,000	October 1952.
Greater Wenatchee division		(2)	
Columbia Basin project, third powerhouse, Grand Coulee Dam.	Washington	[3] 178,500,000	1951.
Dayton project	do	[3] 5,150,000	1948.
Deschutes project, supplemental storage	Oregon	(2)	
Grande Ronde project	do	[3] 33,190,000	1948.
John Day project	do	[3] 117,000,000	1948.
Kalispell project	Montana	[1] 17,635,000	October 1950.
Medicine Lodge project	Idaho	(2)	
Michaud Flats project	do	[3] 4,300,000	1951.
Milton-Freewater project	Oregon, Washington.	[3] 20,600,000	1948.
Pendleton project	Oregon	[3] 23,000,000	1948.
Rathdrum Prairie project, Prairie division	Idaho	[1] 6,531,000	July 1952.
Tualatin project	Oregon	[3] 21,600,000	1948.
Upper Burnt River project	do	(2)	
Wapinitia project, Juniper division	do	(2)	
Willamette Valley storage utilization project		(2)	
Yakima project, supplemental storage	Washington	(2)	

Total	1,089,095,000
Total, Bureau of Reclamation	2,137,491,917

[1] Based on preliminary data; investigations not complete.
[2] No estimate available.
[3] Rough estimate based on reconnaissance investigations, only, made in connection with the report on the Columbia River Basin, or subsequent investigations.

AUTHORIZED PROJECT

Funds have been expended for planning and/or construction of all authorized projects of the Bureau of Reclamation in the Columbia River Basin.

CORPS OF ENGINEERS

	Total estimated cost
Under construction:	
Detroit Reservoir, Oreg	$69,244,000
Lookout Point Reservoir, Oreg	96,611,000
Willamette River bank protection, Oregon	10,550,000
Dalles lock and dam, Washington and Oregon	348,372,000
Columbia River local protection	15,000,000
McNary lock and dam, Oregon and Washington	282,820,000
Chief Joseph Dam, Wash	193,250,000
Albeni Falls Dam, Idaho	31,070,000
Lucky Peak Reservoir	19,300,000
Total	1,066,217,000
Planned or under investigation:	
Green Peter Reservoir	37,000,000
Hills Creek Reservoir, Oreg	32,000,000
Libby Reservoir, Mont	284,300,000
Jackson Hole Reservoir, Wyo	1,807,000
Ice Harbor lock and dam, Washington	104,175,000
Lower Columbia River improvements to existing works	15,750,000
Total	475,032,000
Authorized:	
Cougar	39,781,000

Authorized—Continued	Total estimated cost
Blue River	$13,781,000
Gate Creek	13,724,000
Caserdia	25,126,000
Wiley Creek	8,069,000
Johnson Creek	519,000
Portland, Oreg. (harbor wall)	18,806,000
Waldo Lake tunnel	922,000
Fall Creek	18,780,000
Holly	12,405,000
Willamette Falls fish ladder	200,000
Willamette River snagging and clearing	2,040,000
Priest Rapids	338,900,000
John Day	461,000,000
Pendleton, Oreg	573,000
Willamette River Basin channel improvements and major drainage	14,800,000
Lower Columbia River bank protection	6,033,000
Total	975,459,000
Total, Corps of Engineers	2,516,708,000
Total, Bureau of Reclamation	2,137,491,917
Grand total, Department of Interior and Corps of Engineers	4,654,199,917

Mr. BUDGE. Thank you, Mr. Day.

EFFECT OF DAMS TO DATE

Mr. FENTON. I do not know whether you have given this information before or not, Mr. Day, about the effect of these dams at the moment, or the current effect of them on the productivity of salmon. Has there been a lessening of salmon production due to these dams, compared to that which existed 5 or 10 years ago?

Mr. DAY. No, the run has held up, and we have accurate counts of the fish that move through the ladders at Bonneville Dam, a key checking point.

We have those counts going back to the time when Bonneville was constructed about 15 years ago, and the fishruns have held up very satisfactorily. However, you must remember that during that time we have had the benefit of several hatcheries that were constructed to mitigate the losses due to the wiping out of 1,100 miles of stream above Grand Coulee. The rehabilitation done in the past by the States and the Service together has held the run up satisfactorily. Our fear now is whether with the additional dams going in that runs can still be maintained because most of the good sites for hatcheries have already been appropriated and are being used.

There is a limit to what can be raised in hatcheries because there is a limit to the amount of fish food available. There are also limiting factors to producing salmon in hatcheries, and there are other disadvantages, such as disease, of which we have had some in this past year. There are serious disadvantages to attempting to substitute the natural production that the fishing interests on the west coast have always relied upon to artificial production in hatcheries. We should save everything that we can in the way of natural conditions. After all, nature does a better job than we can ever do.

Mr. BUDGE. Mr. Day, to be sure that you understand correctly the figures which I am seeking here, using your chart prepared by the United States Department of the Interior Fish and Wildlife Service and entitled, "Salmon Habitat as Affected by Dams in Major Rivers of Columbia River Basin," I would like to have the structures which are shown in your legend as being constructed, No. 1; authorized, No. 2; planned, No. 3, and then stating with or without fishways the way they are denominated in the legend.

That is all.

Mr. JENSEN. All right, Mr. Day, thank you.

TUESDAY, FEBRUARY 24, 1953.

COMMISSION OF FINE ARTS

WITNESSES

DAVID E. FINLEY, CHAIRMAN
H. P. CAEMMERER, SECRETARY

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$21,200	$21,200	$26,400
Unobligated balance, estimated savings	−53		
Obligations incurred	21,147	21,200	26,400

Obligations by activities

Commission of Fine Arts:	
1952	$21,147
1953	21,200
1954	26,400

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	2	2	4
Average number of all employees	2	2	4
Average salaries and grades:			
General schedule grades:			
Average salary	$4,995	$5,135	$4,560
Average grade	GS-7.5	GS-7.5	GS-6.7
Crafts, protective, and custodial grades:			
Average salary			$2,420
Average grade			CPC-2.0
01 Personal services:			
Permanent positions	$9,990	$10,270	$16,100
Part-time and temporary positions	2,046	1,590	940
Regular pay in excess of 52-week base	40	40	60
Total personal services	12,076	11,900	17,100
02 Travel	4,658	5,200	5,200
04 Communication services	519	400	400
06 Printing and reproduction	1,781	1,600	1,600
07 Other contractual services	860	800	800
08 Supplies and materials	1,253	1,300	1,300
Obligations incurred	21,147	21,200	26,400

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$1,383	$2,193	$2,093
Adjustment in obligations of prior years	5		
Obligations incurred during the year	21,147	21,200	26,400
	22,535	23,393	28,493
Deduct unliquidated obligations, end of year	2,193	2,093	2,093
Total expenditures	20,342	21,300	26,400
Out of current authorizations	18,954	19,107	24,400
Out of prior authorizations	1,388	2,193	2,000

Mr. JENSEN. Mr. Finley, you are Chairman of the Commission of Fine Arts, and your request for funds for the fiscal year 1954 is for $26,400, which I note is $5,200 more than we appropriated for your Commission in the fiscal year 1953. Will you give your justification for the entire amount and also for the additional amount which you are asking for?

GENERAL STATEMENT

Mr. FINLEY. Yes, Mr. Chairman. This amount, $26,400, was approved by the Budget Bureau for the current fiscal year but the amount appropriated was $21,200. We are asking for the restoration of that $5,200 for the next fiscal year, 1954, in order that the office of the Commission may be properly staffed.

At the present time the Commission has only Mr. Caemmerer who as secretary of the Commission receives a salary of $7,240, and one stenographer who gets $3,030.

We are asking for an administrative assistant, GS–5, at a salary of $3,410, and 1 messenger-clerk at $2,420. Then we have an item of $1,020 for temporary employment. That was allowed last year; and we are asking for it again, because we sometimes have need for some special services that are not provided by the staff.

The Commission's work has largely increased due to submissions under the Shipstead-Luce Act and also the Old Georgetown Act. In both cases the Commission must approve any designs for which permits are requested from the Office of the District Building Inspector.

Mr. JENSEN. For which what is requested, Mr. Finley?

Mr. FINLEY. Permits for construction. For instance, if a building is to be erected facing Government buildings or parks, we must approve the design before a permit can be issued for construction.

Mr. JENSEN. I understand.

Mr. FINLEY. Under the Old Georgetown Act, in the last 2 years, we have had nearly 600 such submissions that could not have been dealt with except for the fact that we have had the voluntary assistance of three architects in Washington who meet once a week and make recommendations as to how we should dispose of these submissions.

The Commission of Fine Arts, itself, is composed of 7 members who are appointed by the President for a term of 4 years each.

They serve on a voluntary basis and are given only their necessary travel expenses from their homes to Washington and back. It would not be possible for the members of the Commission themselves to deal with all these matters unless they had the benefit of the services

of these three architects and also of an adequate staff in the office of the Commission.

Mr. Caemmerer does practically all the work in the Commission's office except the work of the stenographer.

During the last year Mr. Caemmerer was ill for several months. The doctor found that it was definitely due to overwork, and I am quite sure that it was. We are asking that he be given an administrative assistant as authorized by the budget and also a stenographer and a messenger.

During the year the amount allowed for travel permits us to hold not over 12 meetings and usually 10 meetings, because some of the members of the Commission live at some distance from Washington and travel is very expensive. The meetings usually last 1 day and sometimes 2 days, and during that time we must dispose of all of the business before the Commission, which is sometimes quite complicated.

I am sorry to ask for an increase in personnel this year, when the Government is trying to economize, but I do feel very strongly, in view of the important work the Commission is doing, that we ought to have the services of the very small staff requested in order to accomplish that work that must be done by the Commission.

I do not think, Mr. Chairman, that it is necessary to explain in detail to this committee the kind of work that the Commission does, because I think you are all familiar with it.

Workload Statistics

Mr. Jensen. Will you insert in the record a table showing the number of cases referred to you, and the action taken on those cases in 1952? Just place it in the record.

Mr. Finley. Yes, sir.

(The matter referred to follows:)

Cases received in fiscal year 1952 on which action was taken

Item	Cases received	Approved	Disapproved
Old Georgetown Act	255	250	5
Shipstead-Luce Act	70	69	1
Miscellaneous	57	54	3
Total	382	373	9

Study on Integration of United States Art Activities

Mr. Jensen. What did the Commission recommend to the President on the integration of activities in the Government? As I remember, he requested that a study be made in January of 1951.

Mr. Finley. You mean the report that the President asked us to make on the Government's art activities?

Mr. Jensen. Yes.

Mr. Finley. We have the report ready now. We have held hearings, with witnesses from Washington and others who came at their own expense from considerable distances; and we have taken testimony with the funds available to the Commission and without any additional funds. Now the report is ready and in the hands of the

printer. We expect to send it to the President shortly, and then, of course, the Members of the House and Senate will receive copies. The reports cover all art activities of the Government, whatever they may be, and will be a valuable document because it is the first complete survey, so far as I know, that has ever been made of all the Government's art activities, including the designing of buildings and so forth. In that report we have made recommendations to the President which we will submit with the report.

Retirement of Commission Secretary

Mr. Jensen. I do want to say that I am very sorry to learn of your illness, Mr. Caemmerer.

Mr. Caemmerer. Thank you.

Mr. Jensen. I hope in time that you will be fully and completely recovered and better than new.

Mr. Caemmerer. The doctor distinctly said it was due to overwork, and it has gone on over a long period of years.

Mr. Finley. We will lose him next year anyhow, as he is going to retire in June 1954.

Mr. Caemmerer. It has been a long strain, and I am thankful that I have lived through it.

Mr. Finley. He is very devoted to the work of the Commission, and we owe him a great deal.

Mr. Jensen. I am sure of that.

Frequency of Commission Meetings

Some of this money which you are requesting is spent to pay for the transportation of members of the Commission to Washington once a year or maybe twice a year?

Mr. Caemmerer. No, sir; we meet every month.

Mr. Jensen. I remember we questioned the need for bringing the members of this Commission to Washington once a month. I think that has been a bone of contention, as I remember it now. Do you still think it is necessary to bring this Commission to Washington?

Mr. Caemmerer. Yes; very much so, Mr. Chairman. They do hard work, and they keep up the continuity of the projects. There are projects which are continually coming before the Commission, which receive the attention of members during intervals between meetings. At least once a month it is necessary for all the members to come to Washington to consult on these projects before coming to a decision.

Mr. Jensen. They receive no salary?

Mr. Caemmerer. No, sir; they receive no salary, just their travel expenses. They are appointed for a period of 4 years.

Mr. Finley. There is not a member of the Commission who would not be delighted to come to Washington once a year instead of 10 or 12 times a year. Two of the members are deans of important architectural schools—one at Harvard and one at the Massachusetts Institute of Technology. It is at great personal sacrifice that these men come here and give the Government the benefit of their advice once a month.

It would not be possible for us to conduct our work without having at least 10 meetings a year. Otherwise, we could not pass on all of the questions which are constantly coming before the Commission.

HISTORY OF THE COMMISSION

The Commission of Fine Arts was founded 43 years ago. Before that time Congress appointed special commissions or committees to administer the funds and approve the design for special projects. When the project was finished, the special commission or committee went out of existence. Usually such a commission found it necessary to have the services of a committee of experts advise them on these matters His procedure went on for nearly 100 years until the Commission of Fine Arts was founded in 1910. Since that time the Government has had the continuous advice of experts at no cost to the Government except for a yearly appropriation ranging from $10,000 to $21,200. The Commission of Fine Arts is probably one of the least expensive organizations in the Government. At the same time it renders valuable service to the Government, and it is disinterested service furnished by experts on a voluntary basis.

Mr. JENSEN. All right, thank you very much.

WEDNESDAY, FEBRUARY 25, 1953.

GEOLOGICAL SURVEY

WITNESSES

DR. W. E. WRATHER, DIRECTOR, GEOLOGICAL SURVEY
GERALD FITZGERALD, CHIEF TOPOGRAPHIC ENGINEER
GLENDON J. MOWITT, CHIEF, ADMINISTRATIVE DIVISION, GEOLOGICAL SURVEY
H. J. DUNCAN, CHIEF, CONSERVATION DIVISION, GEOLOGICAL SURVEY
W. H. BRADLEY, CHIEF GEOLOGIST, GEOLOGICAL SURVEY
C. G. PAULSEN, CHIEF HYDRAULIC ENGINEER
JULIAN D. SEARS, STAFF GEOLOGIST

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$22,034,100	$25,362,685	$31,070,000
Reimbursements from—			
Non-Federal sources	4,500,567	4,869,300	4,726,000
Direct State payments	994,925	1,055,000	1,055,000
Other accounts	872,022	820,500	830,500
Total available for obligation	28,401,614	32,107,485	37,681,500
Unobligated balance, estimated savings	−169,761		
Obligations incurred	28,231,853	32,107,485	37,681,500
Comparative transfer from—			
"Engineer service, Army"	410,253		
"Maintenance and operations, Army"	4,490,705		
Total obligations	33,132,811	32,107,485	37,681,500

NOTE.—Reimbursements from non-Federal sources above are from States and municipalities for expenses incurred in making cooperative topographic and geologic surveys and water resources investigations (43 U. S. C. 48), proceeds from sale to the public of copies of photographs and records (43 U. S. C. 45), proceeds of sale of personal property (40 U. S. C. 481 (c)), and reimbursements from permittees and licensees of the Federal Power Commission (16 U. S. C. 797). This account receives an advance of $400,000 each year from the "Cooperative advance, revolving fund," and repays it after the close of the year.

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
1. Topographic surveys and mapping	$13,158,599	$11,306,585	$14,950,000
2. Geologic and mineral resource surveys and mapping	5,762,946	5,810,000	6,750,000
3. Water resources investigations	5,846,848	6,187,000	6,960,000
4. Soil and moisture conservation	43,700	43,780	100,000
5. Classification of lands	358,612	360,000	410,000
6. Supervision of mining and oil and gas leases	925,583	1,080,000	1,200,000
7. General administration	669,009	575,400	700,000
Total obligations payable from appropriated funds	26,765,297	25,362,685	31,070,000
Reimbursements from non-Federal sources:			
1. Topographic surveys and mapping	1,880,703	1,832,500	1,797,500
2. Geologic and mineral resource surveys and mapping	214,098	196,000	152,000
3. Water resources investigations	3,385,654	3,875,000	3,827,000
6. Supervision of mining and oil and gas leases	14,864	20,800	4,500
7. General administration	83		
Total obligations payable out of reimbursements from non-Federal sources	5,495,492	5,924,300	5,781,000
Total direct obligations	32,260,789	31,286,985	36,851,000
Obligations Payable Out of Reimbursements from Other Accounts			
1. Topographic surveys and mapping	476,413	300,000	300,000
2. Geologic and mineral resource surveys and mapping	35,065	90,000	100,000
3. Water resources investigations	355,266	425,000	425,000
5. Classification of lands	139	1,500	1,500
6. Supervision of mining and oil and gas leases	4,064	4,000	4,000
7. General administration	1,075		
Total obligations payable out of reimbursements from other accounts	872,022	820,500	830,500
Total obligations	33,132,811	32,107,485	37,681,500

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Summary of Personal Services			
Total number of permanent positions	4,598	4,796	5,542
Full-time equivalent of all other positions	863	886	971
Average number of all employees	5,009	5,375	6,160
Average salaries and grades:			
General schedule grades:			
Average salary	$4,395	$4,451	$4,401
Average grade	GS-6.5	GS-6.6	GS-6.5
Personal service obligations:			
Permanent positions	$18,092,217	$19,675,000	$22,760,000
Part-time and temporary positions	2,400,549	2,590,000	2,878,000
Regular pay in excess of 52-week base	75,973	75,000	90,000
Payment above basic rates	425,265	112,000	132,000
Payments to other agencies for reimbursable details	3,164		
Total personal service obligations	20,997,168	22,452,000	25,860,000
Direct Obligations			
Appropriated funds:			
01 Personal services	16,096,134	17,185,000	20,685,000
02 Travel	1,558,157	1,660,000	2,035,000
03 Transportation of things	157,462	170,000	210,000
04 Communication services	124,129	130,000	155,000
05 Rents and utility services	160,277	280,000	235,000
06 Printing and reproduction	335,348	485,000	540,000
07 Other contractual services	2,910,878	930,000	1,510,000
Services performed by other agencies	1,408,253	1,110,000	367,000
08 Supplies and materials	1,533,182	1,551,655	1,874,720
09 Equipment	2,405,488	1,760,000	3,183,000
10 Lands and structures	14,500	10,700	
13 Refunds, awards, and indemnities	2,936		
15 Taxes and assessments	61,083	63,000	78,000
Subtotal	26,767,827	25,365,355	31,072,720

Obligations by objects—Continued

Object classification	1952 actual	1953 estimate	1954 estimate
Direct Obligations—Continued			
Deduct charges for quarters and subsistence	$2,530	$2,670	$2,720
Total obligations payable from appropriated funds	26,765,297	25,362,685	31,070,000
Reimbursements from non-Federal sources:			
01 Personal services	4,301,401	4,602,000	4,505,000
02 Travel	302,170	320,000	315,000
03 Transportation of things	9,216	10,000	10,000
04 Communication services	19,834	20,000	21,000
05 Rents and utility services	46,584	15,000	15,000
06 Printing and reproduction	17,567	18,000	17,000
07 Other contractual services	279,933	385,000	335,000
Services performed by other agencies	83,102	65,000	70,000
08 Supplies and materials	237,638	269,300	273,000
09 Equipment	197,425	220,000	220,000
10 Lands and structures	186		
13 Refunds, awards, and indemnities	237		
15 Taxes and assessments	199		
Total obligations payable out of reimbursements from non-Federal sources	5,495,492	5,924,300	5,781,000
Total direct obligations	32,260,789	31,286,985	36,851,000
Obligations Payable Out of Reimbursements From Other Accounts			
01 Personal services	599,633	665,000	670,000
02 Travel	37,659	55,000	58,000
03 Transportation of things	3,634	5,000	5,000
04 Communication services	1,939	2,000	2,000
05 Rents and utility services	467	500	600
06 Printing and reproduction	52,539	10,000	10,000
07 Other contractual services	124,071	25,000	25,000
Services performed by other agencies	1,767	1,000	1,000
08 Supplies and materials	25,763	35,000	35,900
09 Equipment	24,505	21,000	22,000
15 Taxes and assessments	45	1,000	1,000
Total obligations payable out of reimbursements from other accounts	872,022	820,500	830,500
Total obligations	33,132,811	32,107,485	37,681,500

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$1,503,644	$2,669,595	$3,232,280
Adjustment in obligations of prior years	240,565		
Obligations incurred during the year	28,231,853	32,107,485	37,681,500
	29,976,062	34,777,080	40,913,780
Deduct:			
Reimbursable obligations	6,367,514	6,744,800	6,611,500
Unliquidated obligations, end of year	2,669,595	3,232,280	4,202,280
Total expenditures	20,938,953	24,800,000	30,100,000
Expenditures are distributed as follows:			
Out of current authorization	19,243,036	22,500,000	27,400,000
Out of prior authorization	1,695,917	2,300,000	2,700,000

Mr. FENTON. The committee will come to order, please.

We have with us today the Geological Survey, of which Dr. Wrather is the Director. I am glad to see you, Doctor, and your staff.

Dr. WRATHER. Thank you, sir.

Mr. FENTON. For those of you who are not acquainted with the membership of this committee this year, I might say that it is the same, with the exception of Mr. Budge, of Idaho, who is the new member on the committee.

General Statement

You are here Dr. Wrather to justify your budget for fiscal 1954 and we would like to have any statement you have to make in regard to the justifications for the budget.

Dr. Wrather. I have a brief general statement, which has been distributed to you, but which I will read.

Mr. Chairman, I appreciate this opportunity to state very briefly the generalized justification of our budget estimate for the fiscal year 1954.

I recognize the imperative need for all feasible economy in Government expenditures. The Congress is obliged to scrutinize with unusual care every request for expansion or even continuation of any Federal project or function. Hence, any request for increased support for the work of the Geological Survey can be justified only if it can be shown that the national need for greater service by the Survey transcends even the need for economy.

There is a growing realization that the functions performed by the Geological Survey should be greatly expanded to support the rapidly developing civilian economy, and this is even more necessary in times of national emergency. This opinion has been most recently expressed by the Paley Commission and I fully concur in its recognition of this problem. As has been repeatedly stressed before this committee, the work performed by the Geological Survey is a necessary and sensible predicate to action by governmental and civilian groups in a wide variety of activities. It should be expanded until it is reasonably adequate to serve national needs.

Military preparedness plus normal civilian requirements have resulted in unprecedented depletion of our mineral resources. We dare not falter in our efforts to discover new sources of supply. The Geological Survey should be enabled to make its maximum contribution to meet this urgent need. Geological guidance is increasingly necessary to enable the mineral industry to conduct an intelligent and effective search for sources of supply. The calls upon the Survey for data and services which will provide such guidance are widespread and insistent, and we are under the obligation to meet them insofar as possible.

Similarly, military preparedness has placed an additional burden upon the topographic mapping facilities of the Geological Survey, which even in normal times are insufficient to produce all the maps necessary to the peacetime economy. The threat of war intensifies the need for maps for military uses and creates new demands for rapid mapping of many areas for emergency purposes. Although the normal mapping program has been reoriented to give all feasible priority to defense requirements increased topographic mapping capacity must be provided to cope with the emergency demands.

Even under normal, peacetime conditions the use of water in this country grows by leaps and bounds—partly through steady growth of population and an increasing per capita consumption of water, but particularly through increasing use of water in many industrial processes. Demands for information on water resources—their location, quantity, quality, and availability—are greatly expanded by emergencies, whether natural emergencies such as floods and droughts, or man-made emergencies such as threats of war. The Survey should expand its facilities for making measurements and an inventory of

existing water supplies, but it should also expand its studies of the natural processes governing the occurrence and movement of waters. In other words, it is under an obligation to vigorously prosecute research in hydrology which will enable it to more effectively serve public needs.

The demands upon the Survey for land classification and mineral-lease supervision continue to grow at an ever accelerating pace, beyond our utmost efforts to meet them. Adequate provision for safeguarding these valuable public assets is obviously justified by the ordinary dictates of good management.

The foregoing remarks are brief highlights of the Survey's work and the underlying reasons for the budget estimate for an appropriation of $31,070,000 for the Geological Survey in the fiscal year 1954, as contrasted with the appropriation of $25,362,685 in the current fiscal year 1953. We will gladly furnish any desired details about our programs and work. In conclusion, I would like to reaffirm my sincere conviction that, despite the urgency for all feasible economy, there is genuine need for the requested strengthening of the Geological Survey.

Mr. FENTON. All right, Dr. Wrather.

AMOUNTS AVAILABLE FOR WORK OF GEOLOGICAL SURVEY, 1953–54

Dr. WRATHER. I hand you herewith, for the record, pages 48 and 49 of the justifications, which list the amount available for work of the Geological Survey from all sources for the current year and estimated for 1954.

(The material referred to is as follows:)

Amounts available for work of the Geological Survey, fiscal years 1953 and 1954, from all sources (as of Jan. 1, 1953)

	1953	1954
Topographic surveys and mapping:		
Geological Survey appropriation	$11,306,585	$14,950,000
States, counties, and municipalities	1,755,000	1,725,000
Department of the Interior: Bureau of Reclamation	2,072,233	1,715,000
Department of Defense:		
Department of the Air Force	956,400	976,300
Department of the Navy	31,000	
Department of State	15,000	15,000
Atomic Energy Commission	30,000	
Miscellaneous Federal agencies	300,000	300,000
Sale to the public of aerial photographs and photographic copies of records	32,500	32,500
Sale of personal property	45,000	40,000
Total	16,543,718	19,753,800
Geologic and mineral resource surveys and mapping:		
Geological Survey appropriation	5,810,000	6,750,000
States, counties, and municipalities	185,000	135,000
Department of the Interior:		
Bureau of Indian Affairs	1,013	
Bureau of Reclamation	379,417	325,000
Defense Minerals Exploration Administration	472,800	234,100
Department of Defense:		
Department of the Air Force	32,976	29,300
Department of the Army	1,040,300	1,014,500
Department of the Navy	738,877	750,200
Department of State	593,200	469,000
Atomic Energy Commission	8,600,282	9,851,500
Defense Materials Procurement Agency	174,894	112,200
Mutual Security Administration	4,534	
Miscellaneous Federal agencies	90,000	100,000
Sale of personal property	11,000	17,000
Total	18,134,293	19,787,800

Amounts available for work of the Geological Survey, fiscal years 1953 and 1954, from all sources (as of Jan. 1, 1953)—Continued

	1953	1954
Water resources investigations:		
Geological Survey appropriation	$6,187,000	$6,960,000
States, counties, and municipalities	3,750,000	3,700,000
Department of the Interior:		
Bonneville Power Administration	22,885	
Bureau of Indian Affairs	63,317	48,700
Bureau of Reclamation	1,258,935	1,306,100
Department of Defense:		
Department of the Air Force	27,000	20,000
Department of the Army	1,295,729	911,100
Department of the Navy	42,113	
Department of State	180,420	210,600
Atomic Energy Commission	223,200	121,900
Mutual Security Administration	1,300	
Tennessee Valley Authority	105,002	95,600
Miscellaneous Federal agencies	425,000	425,000
Permittees and licensees of the Federal Power Commission	65,000	65,000
Sale of personal property	60,000	62,000
Total	13,706,901	13,926,000
Soil and moisture conservation: Geological Survey appropriation	43,700	100,000
Classification of lands:		
Geological Survey appropriation	360,000	410,000
Miscellaneous Federal agencies	1,500	1,500
Total	361,500	411,500
Supervision of mining and oil and gas leases:		
Geological Survey appropriation	1,080,000	1,200,000
States, counties, and municipalities	16,500	
Department of the Navy	33,000	33,200
Miscellaneous Federal agencies	4,000	4,000
Sale of personal property	4,300	4,500
Total	1,137,800	1,241,700
General Administration:		
Geological Survey appropriation	575,400	700,000
Department of the Interior: Bureau of Reclamation	130,187	113,900
Atomic Energy Commission	293,618	157,900
Miscellaneous Federal agencies	162,795	128,200
Total	1,072,000	1,100,000
Summary:		
Geological Survey appropriation	25,362,685	31,070,000
States, counties, and municipalities	5,706,500	5,560,000
Other Federal agencies	19,712,927	19,469,800
Permittees and licensees of the Federal Power Commission	65,000	65,000
Sale to the public of aerial photographs and photographic copies of records	32,500	32,500
Sale of personal property	120,300	123,500
Grand total	50,999,912	56,320,800

Mr. FENTON. I noticed that in the justifications. In fact, it is nearly equal to the amount, or greater than the amount you asked for in the budget, is that correct? The amount you received from other sources?

Dr. WRATHER. Ordinarily, there is just about a 50–50 split, Dr. Fenton. Direct appropriations are approximately one-half of our total funds, and transfers and reimbursements provide the other half.

INCREASES REQUESTED

Mr. FENTON. We will take up the request in the order of your activities. I notice that there is an increase of $3,688,415 for topographical surveys and mapping, which is made up of an increase of $945,000 for geology and mineral resources surveys and mapping; an

increase of $813,000 for water resources; an increase of $56,300 for soil and moisture conservation. The classification of lands shows an an increase of $450,000; an increase of $120,000 for supervision of mining and oil and gas leases, and for general administration an increase of $124,600.

Topographic Surveys and Mapping

Mr. Fenton. Now, will you put the table on page 3 of the justification into the record and discuss a little bit the topographic surveys and mapping?

(The table referred to follows:)

1. Topographic surveys and mapping

Subactivities	Appropriation 1953	Decreases	Base 1954	Estimate 1954	Increases
(a) Engineering mapping	$6,800,000	$20,000	$6,780,000	$9,150,000	$2,370,000
(b) General-purpose mapping	3,500,000	25,000	3,475,000	4,500,000	1,025,000
(c) Reconnaissance mapping	250,000		250,000	300,000	50,000
(d) Map revision	756,585		756,585	1,000,000	243,415
Total	11,306,585	45,000	11,261,585	14,950,000	3,688,415

Dr. Wrather. A general recapitulation indicates there is a requested increase scattered throughout the Geological Survey, almost all of which is directly attributable to the national emergency.

The apparent increase in topographical surveys is merely an effort, by agreement with the War Department, to get into our own Survey appropriation the funds to take care of the increased demand for military mapping.

In other words, year before last, the Army transferred to us about $4,900,000 for mapping and suggested that in the future, funds for mapping be included in our own budget.

We requested the necessary amount in 1953—that is, for the current year—and were allowed $3 million of the amount in our direct budget. This 1954 increase of $3,688,000 is to recapture in our budget the amount to cover military mapping.

Perhaps Mr. FitzGerald would like to say something on that subject. He is our Chief Topographic Engineer.

Mr. FitzGerald. In our original agreement with the War Department, we estimated that we could complete their first priority requirements by 1957. Most of this program is indicated on this map in red. [Exhibit map showing 1954 program.]

We received about $2 million less last year than we had the year before. We conferred with the Department of Defense and curtailed our program as much as we could in order to accomplish the highest priority military mapping with this year's funds.

Since that time, in fact, almost month to month, the military asks us to include additional areas that they consider high priority defense mapping. This means that more than 50 percent of our total effort now is used in preparing the maps that the military needs for defense purposes.

However, for most of these military priority areas there also high priority civilian requirements.

The other half of our program, as indicated by this map, under direct appropriation is the work we are carrying on for the Atomic Energy Commission, the strategic minerals program, Bureau of Reclamation, and our State cooperative programs, which have continued at about the same level for a number of years. It is anticipated that these State cooperative programs will be about $25,000 less next year, in 1954, than this year's total of $1,755,000.

PRESENT RATE OF MAPPING

Mr. FENTON. Is your current request, Dr. Wrather, based on the 20-year program for covering all of the country which is not yet mapped?

Dr. WRATHER. That, of course, is an objective that we have had for a long time, and we have presented a great deal of data on that subject to the committee. In fact, there is an urgent demand on the part of the public for a more rapid completion of the mapping of the country. We have never been able to approach the annual appropriation necessary to do the work in 20 years, but we have cut that margin down in recent years.

What would you say, Mr. FitzGerald, as to the rate of mapping at the present time?

Mr. FITZGERALD. It will take 35 to 40 years.

Mr. FENTON. That is the scope of the present proposed program?

Mr. FITZGERALD. We estimate that in order to carry out the mapping, as we see it now, in a 20-year period we would require an appropriation of approximately $25 million a year.

The 20-year program is not new. The second Director of the Survey proposed a 20-year mapping program in the 1880's, at an estimated total cost of about $18 million. Of course, this estimate was for very small-scale map coverage of the United States. Several times during the history of the Survey such a program has been proposed and was actually authorized by Congress in 1925 under the Temple Act. This act was never implemented, or in fact never approached by appropriations until the last few years, when increased funds have been made available.

We still do not have much more than one-quarter of the country covered with maps that are believed adequate to meet present-day needs.

Dr. WRATHER. I have a chart here that is rather illuminating, Dr. Fenton, which shows the appropriations, by divisions, of the Survey and shows that there has been a sharp upturn in appropriations, beginning with about 1945, but accelerated as we got into the threat of war. It shows quite distinctly the upward trend in the Topographic Division.

Mr. FENTON. Doctor, I wish you would put in the record the gist of this chart, if you will.

Dr. WRATHER. I would be glad to.

Mr. FENTON. Put into the record a tabulation showing the situation for at least 5 years, but if you want to go back to 1945, it is all right, showing the number of finished maps produced, by category, in your program and in the State cooperative program and the figures available for each purpose.

(The tabulation referred to follows:)

Fiscal year	Funds directly appropriated	Total funds available for topographic mapping	Completed map manuscripts (square miles)			Map revision [1] (square miles)
			Engineering maps	General-purpose maps	Reconnaissance maps	
1946	$2,500,000	$5,304,254	5,646	11,946	----------	----------
1947	3,240,000	6,885,211	16,089	9,458	----------	4,003
1948	3,190,000	7,250,303	19,141	18,127	5,529	6,332
1949	5,000,000	8,860,366	20,885	25,438	25,131	7,438
1950	6,420,000	10,399,482	21,262	31,490	292,454	8,505
1951	7,500,000	12,513,794	26,609	63,330	269,920	8,688
1952	8,445,000	17,701,061	43,315	42,632	36,870	10,644
1953	11,306,585	15,509,818	51,100	47,000	10,000	19,700
1954 (estimated)	14,950,000	18,705,000	55,000	60,000	25,000	25,000

[1] The square miles shown above under engineering and general-purpose maps include map revision which is also shown in separate column on right.

STATE COOPERATIVE MAPPING PROGRAM

Dr. WRATHER. The State program provides for cooperation on a 50–50 basis by the States, and it offers the States an opportunity for working out their own program of mapping and of accomplishing a great acceleration of mapping for State purposes. The States have shown a continuing interest in this program. Some States have maintained rather constant contributions to that program throughout the years. For instance, Illinois is one. Several States have been completely mapped. The State of Massachusetts has completed a new program of mapping at larger scales than those previously used. The State of California and the State of Kentucky are both furnishing funds for an integrated, accelerated State mapping program, and we consider this cooperation as a must in meeting the needs of the States and facilitating mapping in certain areas on a matching basis.

MAPPING DONE BY THE MILITARY

Mr. FENTON. Does the military do much of its own mapping?

Dr. WRATHER. The military is supposed to do whatever mapping is necessary for military purposes outside of the United States. There is a certain amount of work that they do in the States. For instance, at the present time they consider there is a need for maps on a scale of 1:250,000, and those maps are published by the Geological Survey and made available for general use.

Do you have anything to add, Mr. FitzGerald?

Mr. FITZGERALD. Yes, sir. In certain cases we have received requests, which I think are typical of the military program, for mapping of their troop-training areas, posts, camps, and stations. They have recently asked us to do certain large-scale mapping in the vicinity of Rolla, Mo. We consider that this area is adequately mapped for civilian use and have said that we would rather use our efforts in mapping areas that had a combined civilian and military use, rather than remapping at a larger scale for military use alone.

That is also true of new mapping in the vicinity of St. Louis, Mo., where the Army Map Service is starting a rather large program to remap areas covered by the Survey. When they do untertake such a project the new maps meet our specifications, and by agreement are prepared by us for civil issue. By the same arrangement mapping accomplished by the Survey covering the high-priority military areas

is turned over to the military and they in turn publish their military edition with necessary "grids" and on a different scale for their purposes.

The Department of Defense is not doing very much mapping in the States at the present time. They are doing some in Alaska, but they recognize, as they have for a long time, the Geological Survey's responsibility for the domestic topographic mapping program.

Mr. FENTON. I notice most of the requests come from the Department of the Air Force; is that right?

Mr. FITZGERALD. That is not a direct appropriation and it is not concerned with the mapping of domestic areas. The work is done in the survey by a unit that was set up early in World War II to meet special requirements with special techniques for aeronautical charts. We still have a unit of about 250 people here in Washington working on radar and other classified charts of a special nature for the United States Air Force. This work is paid for by transferred funds and does not involve standard topographic mapping of areas in the United States.

NUMBER OF SQUARE MILES MAPPED PER YEAR

Mr. FENTON. According to your justifications, you are mapping 125,000 to 150,000 square miles a year; is that correct?

Mr. FITZGERALD. We are mapping now at the rate of about 70,000 square miles a year in our two principal scales.

May I refer to the exhibit wall map? This map shows the projects that we are now working on, and involves a total area of 611,000 square miles in all categories indicated by the various colors. We are not going to complete all of this mapping this year, but in each one of those colored areas we have either started mapping or in some cases are just completing it. We will complete, at the current rate, about 70,000 square miles of the total area this year. In some cases we have just started aerial photography and in other cases the maps are about ready for printing.

REQUESTS FOR MAPPING

Mr. FENTON. About how many requests do you get from the various departments for maps in a year?

Mr. FITZGERALD. These requests exceed by many, many times the amount of mapping we can accomplish. The program is set up systematically through the Bureau of the Budget, which gets the mapping requirements each year from the Federal agencies. On the basis of these requests we include in our program the areas that they consider to be of the highest priority and those, of course, that we can accomplish, remembering that most of our effort, or more than half of it, is concentrated on the military program. Most of these requests received through the Bureau of the Budget are reflected in this last item on the exhibit map as "other requirements." You can see these areas are very spotted and rather small in comparison to the other areas, but nevertheless the total requests received each year from the Federal agencies are much more than we could possibly accomplish.

In addition, a great many of the States, particularly the Western States, have recently set up State mapping committees for the purpose of establishing State priority programs for mapping.

MAPPING FOR THE BUREAU OF RECLAMATION

Mr. FENTON. You do a great deal of work for the Bureau of Reclamation, I notice.

Mr. FITZGERALD. That is true, especially in the Missouri River Basin. This is a very large program and designed to meet the needs of those projects that are planned for construction in the immediate future.

There is an increasing awareness on the part of Reclamation and other construction agencies that topographic mapping to be of maximum value should be completed before preliminary planning for any project is undertaken, and, therefore, we have attempted with their help to sort out the priority areas for mapping.

When the Department of Defense imposed this very heavy program upon us, we were forced to cut back a lot of reclamation mapping in order to meet the military requirements.

Mr. WRATHER. Incidentally, that last-named item comes to us through a special appropriation for the Missouri Valley.

Mr. FENTON. Yes, I know that.

Before any major project is taken up by the Bureau of Reclamation, they do ask for your advice on the geology of the area?

Mr. FITZGERALD. Yes, both mapping and geology. There is an established procedure within the Bureau of the Budget for reviewing reclamation projects in order to determine what basic data and surveys are available for that area. In reviewing a new reclamation, or flood-control project, the first question asked is regarding the availability of maps of the area on which to base preliminary plans.

Therefore, an effort is made, insofar as possible, to provide the maps in advance of the preliminary planning for a project.

Mr. BUDGE. Would the chairman yield to me for a question at this point?

Mr. FENTON. Yes.

Mr. BUDGE. I know on the Oregon-Idaho border you have a very large area where you are conducting some activity. What is the nature of that? I understand it is for the Bureau of Reclamation.

Mr. FITZGERALD. I am not sure that I can answer that without going back to the original request, because some of those programs were started several years ago and the requesting agency has refused to relinquish its priority request. A lot of that work has been nearly completed, but I do not know specifically the status of this project. I would have to go back into the records to look that up.

Mr. BUDGE. I note from this map that this is an operation planned for 1954?

Mr. FITZGERALD. That is true, but remember it does not mean that the area shown in color is an area that we are starting work on this year. That project could have been started 3½ to 4 years ago, because it takes a cycle of 4½ years to complete the job. The map shows you that we are working in that area and we propose to work there in 1954.

Mr. BUDGE. I am wondering about that in view of the fact that I understood you a moment ago to say the policy of the Bureau of the Budget in dealing with the agencies required a complete map before preliminary planning for any project.

In that area the Bureau of Reclamation has not only completed its preliminary planning some years ago but has sent to Congress all of the projects that are in that area.

Mr. FITZGERALD. Yes, sir.

Mr. BUDGE. Then, why would your mapping continue if your first statement is correct?

Mr. FITZGERALD. Simply because in mapping for the Bureau of Reclamation, the War Department or AEC, when we start a project, it goes through several phases of work. We can make available to Reclamation or other agencies copies of maps in preliminary form that they can use for their own work far in advance of publication. Reclamation in many of these areas has already used all of the map information they need for this work long before we have finished our job. For our own purpose we continue drafting, or the process of preparing the maps for final publication as part of the topographic atlas coverage of the United States.

Mr. BUDGE. You can see this would be a little confusing, if other areas of this same nature are in this same situation, when you say that the mapping must be done before the project planning, and in this instance the project planning was done years ago.

Mr. FITZGERALD. However, the mapping has been available in the form that they needed it. They can use blue-line plans in engineering planning, and they do. They require us, as soon as we complete the phase we call stereomapping—that is the laboratory work—on a map, to turn over the blue-line drawings which meet their immediate requirements.

Our job does not stop there, because in addition to Reclamation, that area is of interest to other map users. In order to provide that service, we must publish the final standard topographic quadrangle of the area, and so, we continue our work. In some cases we may defer this work, and in this case we may have picked it up again this year, because of our drafting capacity. We eventually draft all mapping for publication in standard quadrangle form.

There are a great many areas shown on this exhibit map that are exactly in the same category, because it takes a 4-year cycle to complete the published map.

Mr. FENTON. Does the Reclamation Bureau do any mapping of its own?

Mr. FITZGERALD. Yes, sir.

Mr. FENTON. Is there any duplication here?

Mr. FITZGERALD. I do not think there is duplication. There was at one time, but we do not do what they call construction surveys. Our mapping is at a scale of 1 inch equals 2,000 feet and provides map information for their general plans, but when they actually start construction, they need and make very large-scale surveys for small areas.

We arranged with the Bureau of Reclamation several years ago, in order to avoid duplication that before they start map work in any area, they clear the project with us. Often, if it is a contract job, which may call for large-scale maps, we prepare the specifications and inspect the work for them to see that they get standard work. In other words, we see that they get what they are paying for. There is no duplication between what the Bureau of Reclamation is now doing and the work that the Geological Survey is doing in mapping.

TYPES OF MAPPING

Mr. FENTON. Now, for the record, Doctor, I wonder if you would just give us a brief explanation of the different kinds of mapping that you do, general-purpose mapping, engineering mapping, etc., so that we might differentiate between the various types of mapping.

Dr. WRATHER. It would be better, I think, Dr. Fenton, if we prepared that and submitted it for the record, rather than attempting to state it here.

Mr. FENTON. It does not have to be too lengthy, just a very brief answer.

(The matter referred to follows:)

Engineering maps are prepared in 7½-minute units at the scale of 1 inch equals 2,000 feet (1:24,000) with contour intervals of 5, 10, 20, or 40 feet, depending on the terrain.

General-purpose maps are prepared in 15-minute units at the scale of approximately 1 inch per mile (1:62,500) with contour intervals ranging from 10 feet to 80 feet.

Reconnaissance maps are generalized small-scale maps prepared mainly by compilation from existing larger-scale maps. The 2 principal series are the quadrangle maps at the scale of 1 inch equals 4 miles (1:250,000), and the State base maps at the scale of 1 inch equals 8 miles (1:500,000). The contour intervals range from 50 feet in flat terrain to 500 feet in mountainous terrain.

Mr. FITZGERALD. I might be able to give you something along that line at this time.

The engineering mapping, as we designate our large-scale work, is the 7½-minute quadrangle series, and is on a scale of 1 inch equals 2,000 feet. This quadrangle is a sample of that type of mapping.

Now, because much of our program this year and in the past few years has been set up to meet military and reclamation needs or other construction programs, about four-fifths of the maps we are now making are at this scale. This is our largest scale and is what we call engineering mapping needed for immediate construction programs. This [referring to sample quadrangle] happens to be a reservoir site and here they need information for power lines and for other construction purposes. In the mountain areas and in certain other areas, where after a study we determine that we can provide adequate map coverage for the area at a smaller-scale map we use a scale of 1 mile to the inch. This we call our general-purpose map, or the 15-minute quadrangle. It takes 4 of the 7½-minute quadrangles to cover the area of one 15-minute quadrangle. However, we must review the choice of scales very carefully. Too often we find that before we have completed an area at the smaller scale, the Army, or someone else, needs a larger-scale map, but at the same time we do not wish to spend more money than is required to provide an adequate map of the area.

The third category, the reconnaissance map, covers for the most part our maps of Alaska. Alaska is almost 600,000 square miles in area and we have, as part of our military mapping program prepared a set of new maps—just completed this year—on this 1 to 250,000 scale series, covering the entire Territory. This series is designed not only for the military but for civilian use.

We do a certain amount of this small-scale mapping in the United States in cooperation with the military, but not very much at the present time.

Also, under the grouping of reconnaissance mapping, we prepare, as we have for many years, State base maps at a scale of 1 to 500,000, which are used for all sorts of base maps by the Federal and State governments. That is, we compile a map of each State at a scale of 1 to 500,000. The 1 to 250,000 and the 1 to 500,000 scales are our principal reconnaissance maps.

Mr. FENTON. Of course, you have to revise them periodically?

Mr. FITZGERALD. We have to revise them, and particularly the Alaskan series, of which there are 157 different maps, covering the Territory. Many of them are not very good, and we are revising those currently where we have new information and when the area itself justifies it. We believe that for much of Alaska good maps at this scale may be satisfactory for many, many years to come.

Dr. WRATHER. Does that meet your requirement?

Mr. FENTON. Yes; I understood the thing, but I just wanted it in the record for someone that might inquire about it.

COORDINATION OF FEDERAL AND STATE COOPERATIVE PROGRAMS

Now, how is the State cooperative program fitting into the total mapping program in terms of meeting your long-range objectives?

Mr. FITZGERALD. It is part of our long-range program. The maps, of course, are exactly the same kind of quadrangles that we prepare for the military, for reclamation, or anyone else, and are part of the national topographic map series.

The reason for State cooperation is that the State itself is anxious to expedite mapping in certain areas. As you know, Kentucky this year is putting up $830,000 to match a similar amount by the Federal Government for mapping in Kentucky. California has a continuing large program. In addition, Pennsylvania and 24 other States are cooperating with us this year on topographic mapping.

Mr. FENTON. I was just wondering about that Kentucky situation. I notice they are the greatest contributors.

Mr. FITZGERALD. Well, I believe that is because Kentucky was convinced several years ago that they would further the interests and the development of the State by having an adequate base map, and I am convinced that the records of the State will prove that that idea was completely justified. Under our program we have to complete the whole State in 5 years and I believe we will accomplish that.

Dr. WRATHER. It is a particularly efficient means of doing work where you can concentrate your efforts in an area and carry the successive stages right through to completion. In other words, it is an economic and efficient means, provided the States are willing to put up the money to get the program under way and to give the program the impetus to push it through.

Mr. FITZGERALD. That type of program was started in 1884 when Massachusetts first appropriated money for cooperation with the Survey in mapping the State, a job which was completed many years ago. The State continues to appropriate a little money each year to revise the existing maps and keep them up to date. That is true with Puerto Rico, which is now completely mapped and which maintains an active revision program.

REASON FOR INCREASING ANNUAL REQUESTS

Mr. FENTON. I know you have a terrific job, and I know the requests are many. I certainly think it would be to the advantage of the country if mapping could be completed as quickly as possible. I think that is all on that.

In your justifications you request $14,950,000, which is an increase of $3,688,415. Your requests, of course, are necessarily getting higher each year with the amount of work that is involved.

Mr. FITZGERALD. Mr. Chairman, if we do not meet these needs, the result will be that other agencies will start in mapping, because they have to have maps. Past history has proved that the cost of such special-purpose mapping is very high and the maps are not satisfactory. The net result is that the Nation spends a lot of money for temporary expediency substandard maps that eventually have to be done over again.

Mr. FENTON. This is really the heart of the Geological Survey function; is it not?

Mr. FITZGERALD. I believe that is right. Mapping is the first basic data job. Some of these other gentlemen of the Survey would disagree with that, probably, but it seems to me that mapping should come first.

We will say it is the largest item but along with various other functions of the Survey, which are the heart of every organization.

Mr. FENTON. I have been interested in the water and geology picture pretty much myself.

Mr. FITZGERALD. You cannot efficiently do much with water or geology studies unless you have a good base map.

Dr. WRATHER. There is an illuminating figure on page 10 of the justifications which shows the total maps to be issued this year, 1953, 800 new maps and reprints and revisions of 500. Under the contemplated program for next year, 905 new maps and 600 reprints.

AUTHORIZATION FOR MAPPING FUNCTION

Mr. NORRELL. Doctor, I know you are doing this under an act of Congress—authorization by Congress. How did this work start in the beginning?

Dr. WRATHER. It started away back at the beginning, Mr. Norrell, and the foundation of the Survey. As a matter of fact, it even antedated the foundation of the present Survey when they were four independent geographical and geology organizations working in the West.

Mr. NORRELL. There was a law that was passed back at that time?

Dr. WRATHER. Yes. The request for appropriations to do this exploratory work involved mapping, and Congress assumed that mapping was basic to the proposal, and it started off with the area of investigations of the West. Then, when the Geological Survey was founded in 1879, appropriations included funds for topographical mapping, first in a general way and by specific mention beginning in 1888. The organic act did not include specific wording covering topographical mapping, but the clear understanding of Congress is evidenced by continuing appropriations for that function throughout the years.

Mr. NORRELL. Have you ever examined your legislative enactment to see if you had an act of Congress expressly providing for this work and, if so, will you give us a citation on that?

Dr. WRATHER. Yes. We can get and submit an answer to that.

Mr. NORRELL. You can add that to the record.

Dr. WRATHER. Yes. The matter has a long history going back many years.

Mr. NORRELL. I think we really ought to have a reference to the basic laws that you are operating under.

Dr. WRATHER. Yes, sir.

(The material referred to follows:)

Although topographic surveys were not specifically mentioned in the Organic Act of March 3, 1879, supra, establishing the Geological Survey, authority for making them was construed to be inherent in the language directing "the classification of the public lands and examination of the geological structure, mineral resources and products of the national domain"; and in the further language that "The publications of the Geological Survey shall consist of * * * geological and economic maps illustrating the resources and classification of the lands * * *." Topographic surveys were therefore promptly undertaken. The propriety of that interpretation was evidenced by the action of Congress in 1888 when, in appropriating for the fiscal year 1889 (25 Stat. 505, 526), it made specific provision for topographic surveys. Similar specific provision has been made annually since that date. Moreover, authority in the Geological Survey to make topographic surveys was recognized in two other early acts of Congress: The act of June 11, 1896 (29 Stat. 413, 435, 43 U. S. C., sec. 38), requiring that in making topographic surveys elevations be marked by iron or stone posts or permanent benchmarks; and the joint resolution of February 18, 1897 (29 Stat. 701, 43 U. S. C., sec. 42), authorizing and directing the disposal of "topographic * * * maps and atlases of the United States, made and published by the Geological Survey." Thus, for more than half a century Congress has continuously recognized the making of topographic surveys as an integral part of the functions of the Geological Survey.

NECESSITY FOR REMAPPING

Mr. NORRELL. Now, how many times has this area that we have portrayed on the map now before us been mapped down through the years? Do you know, or has it ever been mapped before?

Mr. FITZGERALD. There are a great many areas that have never been mapped before in the area covered by this map. There are many areas that were mapped at smaller scales that are now being mapped at larger scales.

Mr. NORRELL. Are we doing much duplication of previous work in the mapping program?

Mr. FITZGERALD. Do you mean within the Survey?

Mr. NORRELL. Work that we have heretofore done in mapping.

Mr. FITZGERALD. Yes, sir.

Mr. NORRELL. Why is that necessary?

Mr. FITZGERALD. Because in the days of the Hayden, Wheeler, King, and Powell surveys much of the mapping was exploratory. There was little known of the West. These expeditions made exploratory maps with very crude instruments and made them very rapidly. As requirements progressed in the developed areas, they made larger-scale maps. Many of these were still made with comparatively crude instruments, and in some cases for this reason the maps are not adequate for modern needs even at large scales.

Mr. NORRELL. In what respect are they not adequate?

Mr. FITZGERALD. They are not adequate because of error in relative locations or horizontal and vertical positions of mapped features.

The instruments used were not adequate for accurate work. In modern mapping, based on aerial photography, we can get all of the detailed information required and adjust it to goedetic control. It would have been impossible 50 years ago to make the kind of a map we make today. Perhaps this illustrates what I am trying to say. Great Britain with 97,000 square miles in total area was mapped 100 years ago at a scale of 1 mile to the inch, which is our intermediate scale. Their Ordnance Survey today is spending just about as much money remapping Great Britain as we are spending in the United States in spite of the fact that we only have about one-quarter of our far larger area adequately mapped. They are doing this work because they require larger scales and more detailed maps in areas where there was heavy damage during the war, and because, as their land becomes more valuable, they require larger-scale maps. Their new maps are at much larger scales than anything we are now doing in the United States.

Mr. NORRELL. Well, is the improvement worth the money we are having to pay to remap this area? We are spending a lot of money on that, and I am thinking about whether or not the value is worth the effort.

Mr. FITZGERALD. Yes, sir. I believe it is worth the effort and I think Kentucky is a good example. Kentucky is spending about a million dollars a year to cooperate with us in obtaining new maps on a larger scale, because they are in great need of them. They do not want to spend the money. They have a tight financial situation there, but they believe that new and better maps are an important factor in the development of the State.

NUMBER OF MAP COPIES PRINTED

Mr. NORRELL. Well, when you map an area now, do you have duplicate copies of that map?

Mr. FITZGERALD. Yes, sir.

Mr. NORRELL. About how many copies do you have to publish?

Mr. FITZGERALD. We publish about 3,000 copies.

Mr. NORRELL. Of each map?

Mr. FITZGERALD. Yes; of every quadrangle.

Mr. NORRELL. In the course of time, do you have to discard a lot of unused maps, or do you have to sell more of them?

Mr. FITZGERALD. We do not discard very many, but when an edition is exhausted—and we have a great many that are exhausted, because our printing facilities cannot keep up with the demand—we reprint if we have the facilities at the time. We also attempt to revise the culture, that is, add new roads, new buildings, new houses, before reprinting, but sometimes we are not able to do that. We keep the printing plates so that we can reprint the map on demand.

PURPOSE OF TOPOGRAPHIC MAPS

Mr. NORRELL. Now, I would like you to answer this question, if you can, as nearly as possible in laymen's language and from a layman's viewpoint. What intelligence or what information do your maps convey? Now, I think I know the answer, but I want to know what you say.

Mr. FITZGERALD. It conveys information as an accurate picture of the terrain. For instance, if a new access road to the reservoir shown on this map is to be built, it can be planned more efficiently on the map, by figuring the best grade and location. If the reservoir in this particular area is to be raised by 20 feet, the water will cover a great deal of additional area, and that can be computed very readily from the map.

Mr. NORRELL. It furnishes information as to terrain, land and water?

Mr. FITZGERALD. Yes, sir—land and water.

Mr. NORRELL. Would any other purpose be served or any other intelligence be conveyed from the map?

Mr. FITZGERALD. There are very many other public and private uses. The military consider such a map is vitally necessary for defensive or offensive military operations, such as the movement of troops through a given area or for the proper location of a defense installation. To control artillery fire, they also need the elevation and position as shown on the map in order to hit a given target.

Mr. NORRELL. How long do you think these maps will be usable?

Mr. FITZGERALD. We believe that in our modern series of 1 to 24,000 scale maps, which eventually we will recompile into mile-to-the-inch maps, we have a basic map that is tight enough in specification so that it will not have to be changed except to revise the culture—that is, to add new roads, new buildings to that map—and we will do that in a great many cases at frequent intervals.

POSSIBILITY OF REDUCING ESTIMATE

Mr. NORRELL. I notice you have a sizable overall increase over last year, and actually it is more than ever requested by the Geological Survey. I have always been very favorable to the Geological Survey, as you know, but this year some of us on this committee have been following our new President in trying to get the budget either balanced or in substantial balance, and I notice this is going in the other direction. I wonder if there is anything in here that can be reduced?

Mr. FITZGERALD. I honestly do not believe so. A large part of that increase was due to the fact that the military has increased its requests for what they consider essential mapping for defense. Now I am not in a position to question that, but suppose we were not able to go ahead with the program that has been proposed in this request. It would certainly mean that the military itself would start mapping activities. That is not desirable, because early in World War II and in World War I they did a lot of mapping that met only the military requirements, and in doing so spent just about as much of the taxpayers' money for the special military maps as the Survey would spend to make a standard map, and the military map was not satisfactory for civil use. Many of the States are now putting up money for cooperative programs to remap such areas. Connecticut, as an example, is remapping areas that were mapped by the military for defense purposes, because the maps are not adequate for highway planning and other civil use.

AGRICULTURE DEPARTMENT MAPPING

Mr. BUDGE. Does the Department of Agriculture do any mapping which is similar to the mapping that you have described?

Mr. FITZGERALD. No, sir, generally they do not. They make mosaics from large-scale air photographs of certain areas. They use those mostly for crop-control purposes and activities of that kind. There is one agency in the Department of Agriculture, however, the Forest Service, that does topographic mapping.

Mr. BUDGE. I should say it does, because they have topographical maps of all the forest area in my State of Idaho. You do not list any of those as being available.

Mr. FITZGERALD. That is right, and it is because of the fact that we have been unable to meet their demand for maps that were satisfactory for administrative purposes. The Forest Service would like to prepare what we would call a substandard map that would satisfy their own administrative needs, but they are required by the Bureau of the Budget to prepare standard quadrangle maps to national map specifications and when they complete their work the manuscript copy is turned over to the Geological Survey where it is edited and published as part of the national mapping program.

Mr. BUDGE. Why do you not show it on this topographic map that you have in your justification? You would lead the committee to believe, for example, that my own State of Idaho is about one five-hundredth mapped when I know that is not the case.

Mr. FITZGERALD. Well, it is true as far as standard topographic maps are concerned. The Forest Service has compiled rather crude reconnaissance maps of much of the unmapped area for their own use.

Mr. BUDGE. They have some excellent topographic maps.

Mr. FITZGERALD. For parts of the State.

Mr. BUDGE. Then why do you not show it here?

Mr. FITZGERALD. We show it if it is considered to be standard quadrangle mapping.

Dr. WRATHER. In recent years we have had an understanding with the Forest Service which is similar to the one that is mentioned for the Reclamation Service, in which they submit manuscript copies to us, and then they are carefully checked and edited after which they are published by the Geological Survey and made a part of the national map series. As to a good deal of the early mapping, the kind that preceded that agreement, they issued special-purpose maps which, you might say, were not standard maps in respect to accuracy or content.

Mr. BUDGE. In line with the remarks of the gentleman from Arkansas, it has always been my impression that it was a function of the Geological Survey to do this work, and I am wondering why the Department of Agriculture, through the Forest Service, has spent so much money, which I know they must have, to prepare those topographic maps, which I understand is the chief function of your Bureau.

Mr. FITZGERALD. It is very little money by yearly appropriations, and everything that they do now is carefully coordinated and discussed with us. As in the case of Idaho there is hardly any State

that does not have at least some maps. Even in eastern Oregon they have sketch maps of some kind, but they do not satisfy the needs for reclamation or geology, and in the majority of cases they are not topographic maps. They are planimetric maps, or maps that do not show relief by contours.

NEED FOR SHOWING BUILDINGS ON MAPS

Mr. BUDGE. In answer to one of the questions of the gentleman from Arkansas I understood you to say that as you revise these maps from time to time you intend to add new buildings. Is it your intention to show buildings on your general maps?

Mr. FITZGERALD. We show every building on every large-scale map; yes, sir.

Mr. BUDGE. This program will obviously never end, then.

Mr. FITZGERALD. Yes, that is right; it will never end. It never has ended in any of the major nations of the world.

Mr. BUDGE. Why is it necessary on a topographic map to show every building?

Mr. FITZGERALD. For instance, when we make these maps for military use, if they have troops in the country or the area, the location of houses, roads, and so forth, is often important information.

SECURITY CLASSIFICATION OF MAPS

Mr. BUDGE. Again on this matter of military use I want to comment a little, in line with the remarks of the gentleman from Arkansas. You have prepared this map for the military and it does not carry any classification at all, even restricted, and you have down on the bottom of it an advertisement to sell it.

Mr. FITZGERALD. Yes, sir; that is right.

Mr. BUDGE. And yet a few moments ago you were telling us that this map is of a strategic area in Alaska.

Mr. FITZGERALD. That is right.

Mr. BUDGE. And you were also telling us that the military wanted you to map parts of the interior of Missouri for military purposes.

Mr. FITZGERALD. That is correct.

Mr. BUDGE. I assume the map in Missouri would be classified, but this one of the strategic area in Alaska would not be.

Mr. FITZGERALD. These Alaska maps were prepared for general distribution but were sent through G–2 for security clearance. There is certain information deleted from some maps. Now, when a map is published by the Military it includes information that is not shown on the civilian edition. They usually show special grids and other military information on them, but before any map is published and issued for sale by the Geological Survey it has to clear through G–2, which of course recognizes that one way of maintaining complete security for Alaska, for instance, would be to withhold all publication of maps. However, the Military also recognizes that such action would delay the development of a lot of essential activities in Alaska that are necessary to the Military as well as to the civilian economy of the country.

DIFFICULTY IN EVALUATING JUSTIFICATIONS

Mr. BUDGE. In closing, Mr. Chairman, I would like to say that I am really disturbed about each agency coming in here and giving as a justification for their expenditure of funds that the Military needs this for military reasons, or that the Bureau of Reclamation needs it to produce power for military reasons.

There is one area that I can tell you about, a project which would take 10 or 15 years to build and still it is of urgent military necessity. I think Congress is going to have to reexamine a lot of these demands that are being made on us by the Military and the other agencies. Your agency is an excellent one. It has performed wonderful service in the history of this country, but I am just wondering if the demands that are being made upon you by the other agencies are anywhere nearly as essential as we have been led to believe.

Mr. FITZGERALD. I believe that they are. We get a great many requests from the State of Idaho for the mapping of areas which are not yet mapped.

Mr. BUDGE. Yes, I appreciate that.

Mr. FITZGERALD. We get a great many requests from every State for that matter.

Mr. BUDGE. A lot of these things could be deferred for a few years. We do not need to complete every single project that the Government is trying to do, in the next two or three years. Some of them can wait.

Dr. WRATHER. Of course, we are never in a position to evaluate a military demand which is made on us.

Mr. BUDGE. I appreciate that.

Dr. WRATHER. We have to accept it on face value when such a request is made, because we do not have access to all of the information.

Mr. BUDGE. I think you can evaluate some of the other areas you have already mapped.

Mr. FITZGERALD. Mr. Chairman, I would like permission to ask that a letter be inserted in the record of this hearing, because I believe it will answer some of the questions better than I can answer them regarding the nonmilitary use of maps. This letter came from the chief engineer of the Puerto Rico Water Resources Authority. They have used our maps quite effectively for a number of years, and this letter, I think, outlines in considerable detail the need for modern topographic mapping from the civilian standpoint and not from the military standpoint.

(The letter referred to follows:)

PUERTO RICO WATER RESOURCES AUTHORITY,
San Juan, P. R., December 1, 1952.

Mr. GERALD FITZGERALD,
Chief Topographic Engineer, United States Department of the Interior, Geological Survey, Washington 25, D. C.

DEAR MR. FITZGERALD: This is in reference to your recent inquiry as to the use that is made of topographic maps by the Puerto Rico Water Resources Authority. A brief citation of actual instances of use may serve to illustrate the value of these maps in carrying out the work of the authority. Maps, of course, are among the most important tools in general use by the engineer, and topographic maps, which add vertical control to horizontal location, may well be regarded as doubly useful for many purposes.

An important function of this authority is the development and utilization of the water resources of the island. This involves surveys of streams and stream flow, study of storage sites, dam sites, and potential power heads, all of which are

directly related to topography. Such surveys in unmapped mountain country can be difficult and expensive, and at times not too profitable.

In one case the authority undertook the exploration of the Añasco River Basin for power sites, this being the largest river in the western portion of the island where it seemed desirable to have additional hydroelectric development to balance the system. Some $100,000 was spent on preliminary surveys before paper studies discouraged further work. Much of this could have been saved if good topographic maps had been available for the entire drainage basin.

The southwestern Puerto Rico project, on the other hand, was almost entirely worked out from paper studies of the United States Geological Survey topographic maps which were available at that time. This project includes 6 dams and reservoirs, 13 miles of tunnel, 2 hydroelectric power plants, many miles of irrigation and drainage canals, and 30 miles of power transmission and distribution lines. All of these main features were located on the topographic maps, thus permitting an accurate appraisal of the project before spending money on fieldwork. Without the maps it would have required months of costly surveys to explore all these possibilities; in fact, I believe it is quite safe to say that such a comprehensive project, closely coordinating the functioning of 6 dams, 6 tunnels, 2 power plants, an irrigation system and water supply, could not have been discovered in all its parts without the aid of the topographic maps.

Prior to having the present maps, some of the most attractive sites were apparent from field explorations, but the integration of many features into a multiple-purpose project was not so obvious and required costly surveys. For instance, one of the dam sites of the above-mentioned project (Yahuecas) was in fact explored on foot many years ago by the writer. Its development was deferred due to the remoteness and inaccessibility of the site. Had it been built at that time as a single-purpose power project, its usefulness for the present comprehensive multiple-purpose project might have been partially destroyed or completely lost.

Another instance where the United States Geological Survey topographic maps were of invaluable assistance was in the discovery and planning of the Caonillas extension project, which includes 4 dams, 4 tunnels (total length of 5 miles), and 1 hydroelectric power plant. These features were all laid out on the maps without field surveys, and were constructed practically as originally planned.

Good topographic maps often permit detailed adjustments in plans which otherwise might be overlooked, or require considerable field work to discover. A case in point is the tunnel location at the Prieto River site in the southwestern Puerto Rico project. Here a shaft inlet to admit the waters of the Prieto into the tunnel system was proposed, but its suitability was questioned due to a fault zone at that location. By study of the topographic map a slight change was made in the tunnel location, which avoided the fault, shortened the tunnel, and substituted an inclined adit for the shaft. This saved some $100,000 in tunnel and shaft construction, not to mention extraordinary costs that might have been encountered in trying to sink a shaft through the fault zone, and the revised layout was planned entirely from the maps.

To attempt a complete appraisal of the uses and value of topographic maps on work of this kind would require a recital of innumerable details of engineering planning, design, and construction. For instance, the southwestern Puerto Rico project requires the building of some 18 miles of access and construction road, much of it in rugged mountain terrain covered with brush, trees, or vegetation. These roads were laid out on the 1:10,000 topographic maps, sometimes aided by boosting the scale somewhat with photostatic enlargements, and large parts of them actually have been constructed without field surveys.

In a similar manner power transmission lines, canals, tunnels, and even the dams, reservoirs, power plants, surge shafts, penstocks, and other major structures can be located with considerable accuracy without any preliminary fieldwork, and thus permit an approximate estimate of the costs involved and the results to be obtained without requiring expensive preliminary field surveys. The size of tributary drainage areas in rough mountain country can be measured quickly and accurately without expensive fieldwork, thus permitting accurate estimates of runoff. If the savings made on all these details could be added together they would doubtless serve to give a better appreciation of the real value of the United States Geologic Survey topographic maps.

One example of money saving usefulness of these maps was a preliminary location of the 42-mile 115-kilovolt transmission line extending from the Dos Bocas hydroelectric plant to San Juan. This permitted accurate estimates of cost without field surveys, even though much of the line traversed rough terrain

and heavy brush. The topographic maps readily solved access problems without any costly surveys.

In many cases the topographic maps permit fairly accurate estimates of storage capacities of potential reservoir sites, and study of these possibilities enables an appraisal of the potential hydroelectric power resources of the island. By this means the authority is able to compare the relative value of the various possibilities and has established a 6-year development program, which is revised and brought up to date each year. The United States Geologic Survey topographic maps are the foundation of all these studies, supplemented of course by such local surveys as are required from time to time.

In the case of some of the old projects, it is apparent that the development might have been different had accurate topographic maps been available at the time. However the extent to which this is true is not always clear because of other factors in the situation. The tendency in the past to construct cheap projects offering a quick and large profit rather than to seek complete development doubtless has been a considerable influence. The authority has listed for future reconstruction two such projects which were incompletely developed, and which can double the power output by such reconstruction. These possibilities were discovered by a study of the topographic maps, and not by surveys.

Topographic maps are useful to many other projects besides hydroelectric developments—they are useful in many kinds of engineering construction. In planning the $20 million San Juan steam electric station, the first problem confronting the authority, and a most important consideration, was to find a suitable location for the plant. The study of this problem was carried on over a period of 2 years, and among the most useful basic data employed for this purpose was the United States Geologic Survey topographic map of the region.

It is believed that the development of topographic maps of Puerto Rico has been and will continue to be of inestimable value in the planning of all kinds of engineering projects in the fields of hydroelectric power, irrigation, means of transportation and communication, urban development, etc., and that they will be instrumental in promoting the rapid development of this island.

Sincerely yours,

CARL A. BOCK, *Chief Engineer.*

Mr. BUDGE. I did not mean to imply, Doctor, that I thought it was your duty to make any screening of the requests which the military made of your agency.

Dr. WRATHER. Yes, sir.

Mr. BUDGE. I do not believe that you should, but I think Congress should so some screening, particularly of the clearly nonmilitary projects that can be deferred for a few years until we get over the hump a little on our fiscal situation, and I think you could assist us in some of the nonmilitary screening.

Dr. WRATHER. There is just one further word about that map in Missouri, and any similar map. The military does consider that they have an interest in the development of plants of various sorts to supply equipment and services to meet military requirements, and they incorporate in our mapping program certain areas where building of defense plants and other industrial activity is important to the military. That is an explanation of the justification of the military requirement for internal and urban area mapping. You will find that they have some special interest in these areas.

Mr. BUDGE. Thank you.

GEOLOGIC AND MINERAL RESOURCE SURVEYS AND MAPPING

Mr. FENTON. We will now take up "Geologic and mineral resource surveys and mapping." We will put the table on page 11 of the justification into the record first.

(The table referred to follows:)

Subactivity	Appropriation, 1953	Decrease	Base, 1954	Estimate, 1954	Increases
(a) Mineral deposits studies	$2,550,000	$5,000	$2,545,000	$2,960,000	$415,000
(b) Mineral fuels investigations	1,400,000		1,400,000	1,650,000	250,000
(c) General service geology	310,000		310,000	400,000	90,000
(d) Alaskan mineral resources	650,000		650,000	840,000	190,000
(e) Capital outlay	900,000		900,000	900,000	
Total	5,810,000	5,000	5,805,000	6,750,000	945,000

Mr. FENTON. Doctor, do you wish to make a statement on that?

DESCRIPTION OF PROGRAM

Dr. WRATHER. There is an increase in this item which largely grows out of the increasing realization of the fact that we are compelled to put forth special effort to find new sources of supply of both metals and minerals. In other words, we have gotten to the point where chance discoveries of mineral deposits are rather remote. It is almost inevitable that from here on out there must be a geological approach made to the discovery of hidden deposits, if we are to find more deposits than so far we have been able to discover. In terms of the national economy this proposed program is not a large item. This is merely the maximum effort we think we can make with the amount of trained available personnel that we can hope to get and based on the amount of progress that we can make in a year. It is an expanding program of necessity. The further we go the more critical and the more important it becomes for us in order to maintain this Nation's position industrially to find new sources of supply.

Therefore the program is a composite program of a number of different projects.

As you will see from the justifications, some of the projects extend over a period of 4 to 5 years before completion and there is in the current budget perhaps one-fifth of the total cost of the investigation. So there are constantly going into that program new items and there are constantly completed investigations that go out, but it is a continuing program which in itself generally does not differ greatly from year to year. In other words, it is rather constant in its objective, but it varies considerably in detail as to areas being investigated.

Dr. Bradley would perhaps like to add to that.

Mr. FENTON. You are asking for increases of $945,000. You are asking for $6,750,000 for the 1954 fiscal year as compared with $5,810,000 in 1953.

RATE OF DISCOVERY AND DEMAND FOR METALS

I notice that there are many subdivisions of this particular item, and I would like to know the real status of our geology in terms of our metals, nonferrous and ferrous metals.

Mr. BRADLEY. I think the significant thing, Dr. Fenton, is that this country's requirements for these raw materials keep on increasing, and yet our rate of discovery of new deposits is actually decreasing rather than keeping up with the increased requirements.

Part of those increased requirements are being, and will continue to be, met by improvements in techniques of recovery or by substitu-

tions of other materials. We should be very thankful for the ingenuity of the technical people of this country. On the other hand, we cannot lose sight of the fact that we must keep on discovering new supplies if we are to maintain our economic and military strength. It is becoming progressively more difficult to find new deposits because, by and large, the easily discoverable ones have already been discovered.

THE PROCESS OF SEARCHING FOR NEW METAL DEPOSITS

In order to find the new ones, we have to rely progressively on more and more elaborate geologic, geophysical, and geochemical techniques. For example, we actually start back in the chemical laboratory in looking for columbium, which is a metal that is much needed in the production of jet planes and for other high-temperature alloys. We start in the chemical laboratory and look at the geochemical relations of that element with the others in order to find in what unexplored places we should go to look for it.

By that means we found, for instance, that there is columbium in the bauxite ores of Arkansas; a fact I mentioned last year when we were before this committee.

I think you would be interested to know that now we are trying to improve these techniques. We started these improved techniques of search some years ago, during the war, with the development of the airborne magnetometer. We followed that with a program of geochemical prospecting, which has developed now to the stage where many of the mining companies are taking up the technique and using it. This is just what we think should happen to our newly developed techniques. We are happy when industry will take over. We will not do systematic prospecting if we can get industry to do it.

In one part of our experimental work with geochemical prospecting we aided significantly in the discovery of an extension of the cobalt deposits at Blackbird, Idaho.

That is the Blackbird mine in Idaho, a little northeast of the center of the State.

One other experimental exploration project that we are carrying on is at Tintic, Utah, where we are trying simultaneously all of the techniques of searching for hidden ore bodies. Geology is the first one. We are making systematic detailed geologic surveys over an area where the geology gives us some reason to think that there is likely to be some hidden mineralization below the thick lava flow. We are carrying on geophysical prospecting right over the same area to see what it can do, and we are also carrying on geochemical prospecting over the same area to see what it can contribute. We use all of these techniques before we start using a drill in order to test any of the area. We do that because we want to find out first the most economical way of determining the presence of a promising target, a place that is worth the expensive business of putting down a drillhole. We want to know whether just geology alone can serve the purpose; whether that is all we should use, or whether some other method should be used; or if a combination of all three techniques is the best way to localize the target area. Even if all three should be used they are, in general, less expensive in the aggregate than drilling. We have carried these studies at Tintic to the stage where we are now drilling. We have found that below the thick lava bed a dolomite

formation that carries ore in other parts of the area is present. We did not know from the geology alone that it was going to be there. We have found by the drilling that is going on right now that part of the dolomite is mineralized. We are excited about it because it looks as if we may be on the verge of a discovery there. Only further drilling tests will prove whether it's just a show or something worth while. But, if we find that there is something there that looks worth while, the minute we can get industry to take over and do that drilling we will back out.

VALUE OF GEOLOGIC SURVEYS TO INDUSTRY

In the ironwork that we are doing, and have been doing for years in Michigan, and now also in Minnesota, we are doing the geologic mapping, working out the details of the underground structure. Then we publish those geologic maps. As soon as one is published of a unit of area the Survey geologists call in geologists of the various mining companies and discuss the map with them. We have found that through the years the mining companies have been willing enough to take over and do their own drilling. Moreover, they have found a lot of new ore by that means.

I mention this work in the iron country because it illustrates our philosophy of not doing anything that we can get industry to do, and that is our idea of the proper way for a Government agency to do. We do the relatively much less expensive part of the work, the geologic exploration. Also, this is the kind of work mining companies will not do because we cover the whole district and cover all the properties regardless of who owns them. No one mining company will do that, or can do it.

Mr. FENTON. Those are the highlights on the nonferrous and the ferrous metals?

Mr. BRADLEY. Yes; I think so unless there are some specific things you want to ask about.

Dr. WRATHER. We are rarely in a position to evaluate the net result of this program because we are not in the mining business. We are to develop new techniques and to advance scientific approaches to everybody alike. Our findings and all of our geological publications, are avidly sought and used by the mining companies.

Once in a while the news comes back to us about new discoveries which are made as a result of the work that we have done, such as cobalt ore in Idaho and iron in Minnesota. Our chief objective is to take an advance position on the development of techniques to carry the search forward; but, as Dr. Bradley says, we go only so far as we must and then get industry to carry on from that point.

We do think that we make a valuable and a significant contribution in the discovery of new sources of supply of many metals and minerals. However, we can never put a dollar sign on it because we never know just what the net results of the work have been.

I think it is an ideal kind of Government operation because we do things which we believe industry is not equipped to do or will not do or will avoid meticulously, and it affords encouragemnet to private industry in actually getting the job of development done.

Mr. BRADLEY. We can put a dollar value on at least one discovery in Wyoming; the trona deposit, a big sodium carbonate deposit, which I mentioned before this committee last year.

We know now, because it is being developed, what that discovery means in terms of new wealth to the Nation. We know now that at present market values there is something over $2 billion worth in that deposit and the edges of it have not yet been reached. We know also that it is the basis for a new chemical industry being established there in central Wyoming, and that the first of three $20 million plants is now being constructed at Green River. That was a discovery by the Geological Survey.

Mr. FENTON. What kind of mineral is that?

Mr. BRADLEY. It is a chemical mineral, a saline mineral. It is used as a flux in the steel and glass industries; it is also used in the chemicals industry.

Mr. FENTON. And, of course, you have plenty of requests from the Defense Department?

Mr. BRADLEY. Well, yes, we receive them from many departments, as is shown by the fact that approximately two-thirds of our geologic work is done for other Federal agencies; the major part of which is for the Atomic Energy Commission.

Mr. FENTON. I noticed that.

OIL, GAS, SHALE, AND COAL SURVEYS

Well, how about oil and gas and shale and coal? What is being done in the fields of oil, gas, shale, and coal?

Mr. BRADLEY. The oil and gas work we do is largely geologic mapping and studying of the various rock strata and their underground relationships. We work almost exclusively in areas in advance of oil-company explorations; either where they are not doing geologic mapping, or where the possibilities look too remote. We give them basic geologic information that they can use in prospecting an area where they are interested.

We have, apparently, adequate resources of petroleum, but we use it in such large quantities that it is of the utmost importance to do all we can to aid in the continuing discovery of new oil and gas pools.

In oil shale we are at this time doing relatively little work, although that is coming into its own gradually.

In coal we are doing more work than we have been doing for a long time in order to get what is very much needed as a national requirement, a reappraisal of just how much and what kinds of coal we have all over the country. That reappraisal is about half made. We are doing it by States. We are using all of the information that the companies and the States have, and that which we can get by our own mapping and from our own records. Nine of the States have already been completed. Five of the reports have been published and four are in process of publication. The reappraisal of the coal in 1 State is in progress and there are 6 more States where the coal has recently been reappraised, or is being reappraised, adequately by State organizations.

Mr. FENTON. You are reappraising anthracite?

Mr. BRADLEY. Yes, everything, all kinds of coal, and then, of course, we have a large-scale project going on, as you know, in the anthracite region. Approximately one-half of it is done—the western middle field, although the reports are not yet written. We are shifting over to the southern anthracite region now where the largest reserves still are.

Mr. FENTON. Yes, I agree with you.

Mr. BRADLEY. And where there is still plenty of water, too. There are about 13 more States whose coal reserves will be reappraised under this program.

Mr. FENTON. There are a lot of questions that I could ask about oil and coal, but I will defer them.

RELATIONSHIP TO BUREAU OF MINES PROGRAM

How does the Geological Survey work on mineral investigations tie into Bureau of Mines work in the same field?

Mr. BRADLEY. In general it is a sequential relationship. Our geological exploration comes first. Let us take a hypothetical case of the deposits of strategic minerals. A good one would be manganese. We do the geologic work and the geological exploration to find out where the deposit is, approximately how large it is, its grade of ore, and what kind of minerals are in the ore. Then the Bureau of Mines takes it on if industry does not pick it up. But if it is of potential value to the Nation the Bureau of Mines may pick it up and either do the development drilling on it to find out just how it can be removed, if that is the problem, or if there are any particular problems in getting it out of the ground. If there is no problem there they might undertake research on the metallurgy of the ore.

The Aroostook County, Maine, deposit is a good illustration. There are huge deposits there but they are of low grade and no one has yet worked on the metallurgy of the ore. I understand the Bureau is working on that, and they have done considerable development work to establish exactly how much ore there is.

PRIVATE INDUSTRY SURVEYS

Mr. FENTON. To what extent does private industry also survey and prospect in this field?

Mr. BRADLEY. Wherever they see any chance of a good gamble or a chance of profit they take it up. If there is anything that can be mined at a profit you can count on industry snapping it up. We are concerned also, of course, about large low-grade deposits that are not economical today, because we need to know about these for future use and for our future security.

Mr. FENTON. That is right.

Mr. BRADLEY. For instance, we will never run short of vanadium; partly because much vanadium is now coming in as a byproduct from the mining of certain uranium ores, and partly because we know in western Wyoming of a very large low-grade vanadium deposit we discovered during the war. It is not being mined and need not be today.

Mr. FENTON. There has been a good deal of prospecting and the like and I believe you have a very, very important job to do for this country.

Now, do the interests of private industry affect the programing of Geological Survey activities, and if so how?

Mr. BRADLEY. Only when their requirements become national requirements. In other words, we do not and cannot by law make any geological surveys or perform any surveys of any kind for private individuals or on private properties for their particular use.

COAL LABORATORY STUDIES

Mr. FENTON. I notice you have an item here, "Coal laboratory studies."

Mr. BRADLEY. Yes, sir.

Mr. FENTON. What is done by way of coal laboratory analysis work which cannot be done by the Bureau of Mines?

Mr. BRADLEY. We do not do coal analyses, Dr. Fenton. All of those are done by the Bureau of Mines for us at the Pittsburgh station.

The work that we are doing in our coal laboratory is basic research on the microscopic properties of coal, which help us in understanding the particular characteristics of coal and in determining, or predicting, what certain kinds of coals can be used for. It is really basic research aimed at finding out what kind of plant materials go to make up coal, and what significance they have in terms of the ultimate properties of the coal.

Mr. FENTON. Do you have any laboratories of your own?

Mr. BRADLEY. What do you mean?

Mr. FENTON. Any physical properties?

Mr. BRADLEY. Well, that is a laboratory of our own at Columbus. It is a small laboratory. There are only two or three people there. We do not have any laboratories that do the same sort of things that the Bureau of Mines does on coal at all. There is no duplication. In fact, this man heading up our laboratory in Columbus was transferred to us from the Bureau of Mines to do this kind of work, which needed to be done, but which was not properly part of their function.

Dr. WRATHER. This also has a very practical application in that it gives criteria on which you can correlate one coal with another, in the case of one lensing out and another one coming in.

Mr. BRADLEY. It has two other practical aspects. We know that certain coals contain uranium, for instance, and the Atomic Energy Commission is interested in certain of them for that potential byproduct use. We want to know why some of them contain uranium and why others do not contain uranium, and the same is true for germanium.

Mr. FENTON. I was going to ask that question a few seconds ago, because I notice that they are doing some prospecting in my area now in the anthracite region for uranium.

Mr. BRADLEY. Yes, sir; we are doing that work for the Atomic Energy Commission.

Mr. FENTON. They also think that there is some oil up in the anthracite region now.

Mr. BRADLEY. I understand so.

CAPITAL OUTLAY FOR BUILDING SPACE

Mr. FENTON. You have an item here of $900,000, for a space utilization program which began in 1952.

Will you give us more details?

Dr. WRATHER. That item rose out of our deplorable housing situation here in Washington. We are doing business at the present time in Washington in 14 different buildings, and to get any orderly arrangement of our business is almost impossible under the housing conditions.

We early recognized the fact that we were going to have to establish service centers at various parts of the Country. We are establishing four such centers, one in Washington, another in the Mississippi Valley, another in the Rocky Mountain region, and another in the Pacific coast region.

Each year we make some progress in getting more adequate housing. These two appropriations of $900,000 for 1952 and 1953 were made to the Survey in order to have Public Buildings recondition a part of the old arms plant in Denver for our use.

The $960,000 requested for 1954 is a similar item which I would like to have our executive officer explain to you because he has had charge of the operation and can tell you exactly what is involved.

Mr. FENTON. All right, Mr. Mowitt, if you will briefly describe this item we will appreciate it.

THE ARMS PLANT AT DENVER

Mr. MOWITT. When we first started alterations on the arms plant at Denver we expected to be able to cover the cost for about $2,100,000.

Mr. FENTON. Is this similar to a regional setup?

Mr. MOWITT. It is a consolidation of much of the facilities we need in the Rocky Mountain area to do work in that region.

Because of the increase in prices while the contract was under way we found that we had to postpone about $297,000 worth of work.

When we found we were not going to be able in 1953 to fulfill the whole program, we carefully selected the work to be postponed in order that no portion of the development of any part of the project be left incomplete and unfit for use. We had to leave out one whole wing, the north wing, and all painting except for the primary painting that was done on the outside to preserve materials, and certain other items amounting in all to about $297,000. This postponed work accounts for the first part of the $900,000 in 1954.

Dr. WRATHER. There is one item in this first part that I think you should mention; that is the $70,000 covering the installation of laboratory equipment which is already purchased. In other words, it would be very unwise to defer the installation of that equipment. This amount is included for the installation of the laboratory equipment which was purchased out of the prior appropriation.

WEST COAST AREA

Mr. MOWITT. There are two other items included in the $900,000. One of them has to do with the center which is under development on the west coast.

We have tried, in every case, to stay out of the high-cost rental areas. Except in Denver, we have not proposed constructing or to have the Government construct; and we have attempted to work on a lease basis with the option to purchase whenever legislation will permit us to purchase.

The west coast area will be accommodated largely in the center that we are starting at Palo Alto; the General Services Administration has signed a contract there for the use of a privately constructed building of about 40,000 square feet, which will cost us about $1.31 per square foot a year to rent.

In these buildings that we lease, we have to furnish equipment that is peculiar to our tenancy.

The $250,000 for Palo Alto would include $135,000 for laboratory benches, sinks, and hoods which have to be installed in the building; $20,000 for library and storage shelving; and $70,000 for movable partitions. In this way the basic rent is kept low, and we can then adapt the building to our use without any additional rental expenses.

Then there is $25,000 for the plumbing and other utilities that are needed in excess of that which would be required in a normal building.

EQUIPMENT FOR NEW BUILDING IN WASHINGTON AREA

The third part of the $900,000 is to provide ourselves with equipment which we would put into a Washington building. As Dr. Wrather has said, we now occupy about 397,000 square feet of space in the Washington metropolitan area, scattered among 14 or 15 different buildings, accommodating about 2,000 people. A large portion of these 2,000 people are here in Washington because our field headquarters are here.

For example, in Arlington, over in Virginia, we have some 506 people who service the Atlantic area, so far as mapping is concerned.

In addition, out of the 2,000 there are about 300 more people who really are field personnel for the Atlantic States area who happen to be located in Washington.

We have found, through inquiry, that private capital would be more than willing to build us a building in which we could consolidate these people who are now so scattered.

The rent for this building cannot be determined, of course, until bids are taken; but the Bureau of the Budget feels, and we feel, and the General Services Administration feels the same way, that no additional rent should have to be appropriated by Congress for this building because we will relinquish high-cost downtown space to compensate for it. We ought to be able to get a building that would accommodate us, with about 440,000 square feet in it, for something less than $2 a square foot.

In moving into this building on a lease basis, certain things should be done in order that we would not have to stop operations in our present location; for to do so would not only mean a serious interruption to and delay in the work, but would cost a considerable sum of money in continuing payrolls. Therefore, we have asked for three items to cover printing presses that should be ordered in 1954 to be available for installation in the building in 1955.

The rest of the money, about $231,000, is for laboratory benches and fixed installations that should be put into that building so that they would be available for use as fast as the building is completed.

We cannot afford to close down the printing plant completely and pay the staff during the long period of time it would take us to move these presses; we are not asking for these presses in addition to the capacity we already have. They would be a replacement for the old presses which should not be moved to the new building.

Dr. WRATHER. Replacement of obsolete presses.

Mr. FENTON. Do you intend to get a new building?

Mr. MOWITT. We hope to, sir, on a lease basis.

Mr. FENTON. On a lease basis?

Mr. MOWITT. Yes, sir. We have 1 building here in Washington, some 40,000 square feet of shop and warehouse space, that we acquired within the last year on a lease basis, for which we pay less than $1 a square foot.

Mr. FENTON. How much of this breakdown is for new equipment?

Mr. MOWITT. About $360,000 of the $900,000 would be for new equipment in all 3 locations.

Mr. FENTON. Have you acquired the buildings or are you on a fair way to acquiring the buildings you need?

Mr. MOWITT. In Denver we have Federal space and we are well along with its alteration. It should be completed so that we could move in within the next few months.

In Palo Alto we have entered into a lease, or the General Services Administration has entered into a lease for us, to provide 40,000 square feet.

Dr. WRATHER. They have provided for the private construction of the building and its lease to us.

Mr. MOWITT. Here in Washington so far we have just plans.

Mr. FENTON. And some of this $360,000 for new equipment is for those planned buildings?

NEED FOR NEW BUILDING IN WASHINGTON AREA

Mr. MOWITT. About $231,000 is for the planned building here in Washington. We have not yet entered into any contract. We have only drawn plans and are working with the General Services Adnimistration in working out the general allocation of space.

Dr. WRATHER. Our space situation, particularly here in Washington has deteriorated very rapidly in recent years.

There is now no place we can go to get our operations consolidated, where we feel we would get efficiency. I feel that where there is waste and inefficiency it is due to the fact that we are scattered all over the map, and we have been in this condition here for the last 4 or 5 years or longer. We have been considering what might be done about it for years. We have discussed it with the Secretary's Office, we have disccused it with the General Services Administration, and we have discussed in on the outside to see what might be available in the way of buildings to be constructed that would meet our needs on a rental basis, and the only consideration is economy in operation, because I hate to see us go on as we are with the inefficiency which we are totally unable to cure until we can get more rational space in which to house our staff.

I do not look for any improvement in the present situation in downtown Washington. But there are many of our operations which can be conducted better by being detached from the confusion and the congestion of downtown Washington. It can be done more economically and cheaper, and we are constantly giving consideration to that. This is merely a progress report on trying to cure the situation here in Washington, which is a source of headaches and annoyances for everybody.

It is a fact that we have demands made on us to do certain jobs, and we have to turn them down because we have no place in which to conduct the operation. Oftentimes they are involved in security operations, which are very hot jobs from a classification standpoint.

We cannot consider them because we do not have the facilities in which to house the operation, the money in these instances coming to us by transfer from other agencies for particular types of work.

Mr. NORRELL. Pursuing that just one step further before I go into something in which I have a personal interest. When the Interior Department Building was constructed, was it not intended to house all of the agencies of the Interior Department?

Dr. WRATHER. I understand that was the original plan. Going back a little further, Mr. Norrell, the old Interior Building is now the General Services Administration Building. Some 40 years ago an appropriation was made by Congress for a building to house the Geological Survey. Before actual construction began, Secretary Lane, who was Secretary of the Interior—and at that time the Interior Department was scattered through a number of buildings—conceived the idea of getting the consent of Congress for a larger building and for adding wings onto it. That resulted in the old Interior Building, completed in 1917. The new Interior Building was first planned to house the whole Interior Department, but for various reasons the building as finally constructed in 1937 had a much reduced floor space, and could not care for the entire Department. Because the Survey had many facilities built into the old Interior Building for their particular use—for instance, the press room, the library, and chemical and other laboratories—the Geological Survey remained in the old building.

Thereafter, the old building was assigned to the new Federal Works Administration, later the General Services Administration—it was removed from Interior to new control—and from that time on we have been subjected to continued pressure for that space. In other words, demands for this space have been great. We have had to give up a part of our occupancy in that building because of the pressures that have been brought on us for housing by the General Services Administration, who have their own headquarters in that building and who are responsible for the housing of all Government agencies. It is a source of continuing harassment, and it interferes with our operation, because we are suddenly called upon to vacate a group of offices and move.

Mr. NORRELL. Now, if this arrangement is worked out to have private capital construct a building, are you going to wind up again with the thing being taken over by the Interior Department or some other agency of the Government?

Dr. WRATHER. I do not know, although I think not.

Mr. NORRELL. That is a hazard we always have to be aware of.

Dr. WRATHER. Yes.

Mr. NORRELL. I can think of a lot of organizations in the Interior Department which undoubtedly have a lot of the space—or some space, anyway—that are not as important as the Geological Survey. I consider the Geological Survey as one of the very important agencies of the Interior Department, and it seems to me, with as much space as we have in that great building and the other smaller and older buildings, that the Geological Survey ought to be taken care of among the No. 1 agencies.

I notice that map on the wall shows all of your geological mineral-resources surveys in our program. Does it not?

Dr. WRATHER. Yes, sir. Those current in our program.

Mr. NORRELL. I like that. You have not been having that heretofore; have you?

Dr. WRATHER. This type of display map is a new approach. In other words, we tried to get our program down in graphic form so you could take a look at it.

Mr. NORRELL. I want to compliment you on that. You can look on the map and tell where this kind of work is being done throughout the United States.

Dr. WRATHER. Yes, sir.

Mr. NORRELL. Now, I notice in my own State there are three markings. What are they?

SURVEY WORK IN ARKANSAS

Mr. BRADLEY. In these two areas geological mapping is going on to aid the discovery of oil. That is a rather important area in through that part of Arkansas now. The geology is very complex and the oil companies are beating paths to our doors seeking our geologic maps.

This one [indicating] is a project undertaken for the Defense Materials Procurement Agency on columbium in the Magnet Cove area. That is an area where both columbium and titanium are known to exist, but it is not thoroughly understood nor is it known how much columbium and titanium might be taken out of there or what else might be found in the surrounding area.

Mr. NORRELL. What do you do with columbium?

Mr. BRADLEY. That is used as a high-temperature alloy in jet-engine parts. I do not know for which parts.

Mr. NORRELL. Are you now making any surveys regarding bauxite or barite in that general area?

Mr. BRADLEY. We are about to start some work—at least, we have some planned—on barite, but the work on the bauxite, we feel, is pretty well done. We know pretty well what the resources are.

Mr. NORRELL. I wish you would give me a breakdown for the record of the columbium and barite which you have mentioned. We will not go into it now, but just for the record, I would say this is one item, if we are financially able, we should pursue as rapidly as possible. We must find new minerals in this country.

(The matter referred to follows:)

Columbium and Barite Project in Arkansas

Columbium, zirconium, titanium, and beryllium have been found in significant amounts in some of the rocks and minerals of Magnet Cove, and at least two neighboring areas appear to have some promise of economic mineralization.

The objective of this project is to make a detailed petrologic and geochemical study of the rocks in the Magnet Cove area in order to better understand the origin and geochemical environment of columbium and associated elements. The area will be remapped at an appropriate scale in order to gain further knowledge of the petrology, intrusive history, and structure of the alkalic rock complex and its relation to the surrounding sedimentary rocks.

When the distribution, composition, and quantity of the various rock types are understood, the resources of beryllium, columbium, zirconium, and other metals can be appraised.

Methods of study: (1) Because of thick soil cover and general lack of outcrops, some techniques will have to be developed to permit plane-table mapping (scale

1:6,000) of the saprolite cover. Panning of weathered materials and crushed rock and hand augering will be used as mapping aids. (2) Drilling for geologic information in critical areas. (3) Sample each unit mapped for: (*a*) thin-section study; (*b*) complete chemical analyses of each important rock type; (*c*) spectrographic analyses particularly for minor elements; (*d*) mineral separation and identification with chemical, spectrographic, X-ray, and optical studies of the mineral separates.

In addition to the plane-table mapping at 1:6,000, some areas will be mapped at scales of 1:600 or 1:1200. Project started February 1 and fieldwork will be completed by June 1954. Reports, to be published as a bulletin or professional paper, should be completed by June 1955.

The Malvern, Ark., topographic map, scale 1:62,500 was released in 1947, and aerial photographs are available.

Technical services to be provided by Survey chemical laboratories include thin sections of rocks and ores, and many chemical and spectrographic analyses.

Barite occurs in a folded syncline that plunges downward toward the Magnet Cove igneous plug. The deposit is being mined from an open pit within 2 miles of the cove. As a part of the Magent Cove project, geologic studies will be made to determine the relation of the barite to the Magnet Cove igneous rocks. If a genetic relationship can be established, the geologists will have clues to guide exploration for concealed barite deposits in other structures within the vicinity of the Magnet Cove igneous plug.

Dr. WRATHER. I think it is highly essential to do the research work that the Geological Survey is engaged in, which is very difficult to evaluate from a dollars-and-cents standpoint.

Mr. NORRELL. There is no doubt about that.

WATER RESOURCES INVESTIGATIONS

Mr. FENTON. At this point, we will insert, for the record, the table on page 23 and all of page 21 of the justifications.

(The matter referred to follows:)

Subactivity	Appropriation, 1953	Decrease	Base, 1954	Estimate, 1954	Increases
(a) Federal program	$2,687,000	$40,000	$2,647,000	$3,260,000	$613,000
(b) Federal-State program	3,500,000		3,500,000	3,700,000	200,000
Total	6,187,000	40,000	6,147,000	6,960,000	813,000

WATER RESOURCES INVESTIGATIONS

A recent consumer survey shows that the scientific and unbiased factual information collected on the Nation's water resources is an increasingly vital factor in maintaining today's economy. During fiscal year 1952 alone the Geological Survey received specific requests for water facts from:

	Number of Requests
Other Federal agencies	4,500
State agencies	1,600
Cities, counties, and water districts	1,400
Commercial establishments	3,800
Individuals	2,000
Total	13,300

The water data requested above were for the following predominant purposes:

	Number of requests		Number of requests
Military establishments	200	Pollution	1,700
Industrial water supply and location	700	Interstate and international allocations	200
Municipal water supply	800	Fish and wildlife, recreation	200
Hydroelectric power	700	Land use, or soil conservation	300
Flood control and/or navigation	2,500	Highway and bridge design	200
Flood forecasting	1,000	Litigation	200
Irrigation	2,300	Undisclosed	900
Rural water supply	200	Other	700
Drainage	500	Total	13,300

The above direct-transaction type of business is only a portion of the use of the products of water investigations. Many hundreds of additional requests for current data on stream discharge, water level, etc., have made it necessary for many of the Survey's local water offices to prepare current periodic statements which total over 20,000 individual issuances for 1952. By such reports the Nation has begun to more successfully manage its already well harnessed water sources.

Mr. FENTON. For water resources investigations, you are asking for $6,960,000, which is an increase of $813,000 over the 1953 appropriation. Will you give us a little detailed information on that?

DESCRIPTION OF PROGRAM

Dr. WRATHER. In connection with water, the same is true there as is true in the other items we have discussed. There is no introduction of anything new in the program. It is an extension of work we have been doing consistently for years, and Mr. Paulsen, the chief hydraulic engineer, can answer any of the details that you want to go into in regard to the particular items involved. You are familiar with the surface water investigations, the underground-water program, the sedimentation program, and the chemical quality-of-water program. There is another item which is relatively small. That is the soil and moisture program, in which we do a certain amount of work for agencies of the Interior Department in the administration of lands under Interior supervision.

The work is divided into five activities, and it is pretty well set forth on the chart behind you here, which does not represent any organization pattern. For simplicity in display, it merely indicates larger areas—somewhat similar areas—of the United States with all the appropriated and transferred money that is spent. The bars represent dollars that are being spent, the red being from the direct appropriations. The green represents the amount from the States and municipalities. Other Federal agencies are represented by the yellow at the top. In other words, the bars are all comparable and represent dollars of expenditures in those areas for those various activities. The circular diagrams are not to be considered in the same category, because they represent the objectives for which the money is spent, whether for agricultural, irrigation, or for flood-control forecasting or conservation. Those merely show roughly the amounts that are spent for those various objectives in the different areas. The bars shown represent money and the circles represent the objectives for which the money is spent.

If you will direct any questions to Mr. Paulsen, I am sure he will be glad to supplement in any way he can, sir.

FLOOD AND SEDIMENTATION SURVEYS IN COOPERATION WITH THE CORPS OF ENGINEERS

Mr. FENTON. Does the Corps of Engineers rely solely on your geological surveys for flood surveys, or do they do some of their own? How about sedimentation surveys?

Mr. PAULSEN. They cooperate quite extensively with the Geological Survey on all water investigational problems, including sedimentation investigations. However, they do quite a lot of sedimentation work themselves, especially in the Missouri River basin on the main stem of the Missouri River. We handle practically all of the sedimentation investigation in the Missouri Basin except on the main stem. The Corps of Engineers do that themselves on the ground that they feel a responsibility for the various reservoirs they are building, and while we have discussed the whole matter of cooperation with them on the main stem and have done some work on the main stem in collaboration with them, nevertheless, the corps feel that, as they have the responsibility with respect to the operation of the reservoirs when they are completed, they desire to perform the sedimentation work on the main stem.

INCREASED INTEREST IN GROUND AND UNDERGROUND WATER

Mr. FENTON. I notice you have a lot of requests for water data—requests going up into the thousands. What is the situation regarding ground and underground water throughout the country at the present time.

Mr. PAULSEN. Well, there is a tremendous growing interest in our ground-water reservoirs in practically all parts of the country, and we are doing what we can to make available the information that can be used to those who desire to develop the ground-water resources either for supplementary supplies or for original supplies in connection with industry and agriculture.

The increase in the interest in ground water has developed very rapidly since the end of the war. In fact, during the war it became an acute problem. With so many defense industries and military establishments, it was difficult to find surface-water supplies that were economical of development, and fortunately we had substantial information but not nearly enough to help out in many instances. A great deal of money was saved in developing the underwater supplies at strategic points, and development has gone on everywhere at an increased pace all over the country. The interest is tremendous. We kept a record of the requests and inquiries that we get directly for a year just to determine how that interest is growing, where the interest lies, in what amount, and in what localities. It was quite a revelation to see how the requests came in from not only Federal agencies but from industries, municipalities, consulting engineers, consulting geologists, and everyone that has to do with the development of water in one way or another. Those requests ran into the thousands, and even during World War II the interest in water and the requirements for water developed to such an extent that we had to make somewhere between 8,000 to 10,000 special reports for the War Production Board in connection with their activities and the allocation of materials and

supplies requested for additional development of water supplies largely in connection with industry. That trend is continuing upward.

Mr. FENTON. We notice there is quite a controversy in the Philadelphia area with reference to an industrial plant. It concerns the distribution of water from the Delaware River to the States of New York, Pennsylvania, New Jersey. I suppose, as long as we develop these great industrial plants, we are going to have this problem.

Mr. PAULSEN. I might add it is perhaps unfortunate that they have been unable to solve the situation among the four principal States that are involved, but the Fairless steel plant, as you know, is developing its big plant at Morrisville, Pa., and they obtained a lot of our basic information as to the potentialities of the water supply from ground sources. We made a special report which was completed last year in Bucks County that I think had a great deal to do with the location of that plant.

INVESTIGATIONS IN THE GRAND PRAIRIE REGION

Mr. FENTON. Before we adjourned this morning Mr. Norrell had a problem that he wanted me to take up with you, and I believe, Mr. Paulsen, you talked to him in regard to the problems. Can you elaborate for the record on any suggestions which you may have for the solving of Mr. Norrell's problem, or have you any comments to make on it?

Mr. PAULSEN. Mr. Norrell, at the time we recessed for lunch, asked me about two things and to supply what information I could for the record.

No. 1 is in connection with Grand Prairie region in the vicinity of Stuttgart, which is a large rice-producing area, and the other relates to the water problems that are now being experienced in some of the bauxite mines in two of the counties of Arkansas.

During the noon hour I made a few notes. First, in connection with the ground-water situation in the Stuttgart area or the Grand Prairie region in Arkansas, where they are very short of water for the irrigation of rice. That is one of the large rice-producing areas of the country, and there have been different programs proposed for bringing additional water into that area for rice production. I think the Corps of Engineers have proposed some plans which are quite expensive, and the Bureau of Reclamation has also made a proposal which is quite costly. But, in view of the fact that the Grand Prairie region is east of the 98th meridian and out of the area in which the Bureau of Reclamation is authorized to work, the people in that area are now wondering if they won't be able to develop enough water themselves by pumping and by artificially recharging the natural ground-water reserves.

Mr. FENTON. They are very inconsistent there, I would say. The Reclamation Bureau does not mind coming east of that 98th meridian, as far as power is concerned.

Mr. PAULSEN. Well, I cannot answer that question; but, as I understand, the Bureau is not authorized to construct irrigation projects east of the 98th meridian, and that is basic in the law of 1902, which I do not think has ever been changed.

Mr. FENTON. That is so far as irrigation is concerned?

Mr. PAULSEN. That is right, sir.

Mr. FENTON. I am talking about the Reclamation Bureau as a whole, though. They tie in power, of course, with reclamation and with irrigation.

RECHARGING GROUND-WATER RESERVOIRS

Mr. PAULSEN. Mr. Norrell asked me if I would make a brief statement about the artificial recharging of ground-water reservoirs, which I told him I would attempt to do. I have a few notes here in regard to it. There is much information about artificial recharging.

Mr. FENTON. If you will, get it and insert it in the record.

Mr. PAULSEN. I will be glad to do that. However, in connection with the Grand Prairie region, I might briefly mention what we know about it now.

The Survey has not made an intensive investigation of artificial recharge in the Grand Prairie region, because we have not had the funds to do it, but we have a general knowledge of the problem. We think we know about how the program ought to be tackled if we had the funds with which to do it, and this is what I would suggest for consideration at this time.

The ground water for irrigation in the Grand Prairie region is obtained from two sources. By far the greater part of the supply is from sands and gravels of Pleistocene age that lie at depths of 30 to 250 feet, but a relatively small amount is obtained from beds of Tertiary age that lie at depths up to 400 to 1,000 feet.

In 1943 the pumpage from the shallow Pleistocene wells was about 261,000 acre-feet, and the total pumpage from the deep Tertiary wells and surface water was about 300,000 acre-feet. The total area irrigated in 1943 was 165,000 acres, but they have irrigated much more than that for which there is not an adequate water supply under present conditions.

The consumption of water from the principal source of supply is greater than the quantity that is added annually by natural recharge. The principal source, according to available data, has a perennial yield of about 135,000 acre-feet, which is sufficient for the irrigation of about 75,000 acres of rice or slightly less than half the acreage that was irrigated.

Taking the Grand Prairie area as an experimental area, we propose to conduct experiments in the principles of artificial recharge by means of wells of the three principal types—screened, gravel packed, and horizontal collectors—and also by means of surface ponding or water spreading. Preparatory to this experimentation, we propose to carry out preliminary research for the purpose of further defining the geology of the area and to program and plan the experimentation. This is highly essential because the installations necessary for adequate experimentation will cost upward of $350,000 and should accordingly be designed and located with care.

The preliminary phases are being carried forward on a very small scale this year. It is hoped to increase the effort substantially next year and in 1955 to begin the full-scale experimentation.

Now, because the total program of ground-water investigation in Arkansas is cooperative and amounts to less than $30,000 per year, we can do only a very small part of the basic research which is needed

to plan a more extensive and intensive program in connection with the artificial recharge of that area.

Mr. FENTON. I do not think there would be any objection to your revising and extending your remarks in regard to the question Mr. Norrell wanted to discuss.

Mr. PAULSEN. Well, I assume this is about what he wanted at this stage, but we would be only too glad to extend those remarks if you think it is necessary.

Mr. FENTON. Well, whatever you think is necessary in order to furnish Mr. Norrell with the proper information.

(The matter referred to is as follows:)

Ground-water reservoirs are like surface reservoirs in that they store water for future use. But, if the rate of use over a long period of time exceeds the rate of inflow, the reservoir responds with lowering water levels and eventually it may go dry. A ground-water reservoir is replenished by infiltration from precipitation or from streams, but the rate of infiltration may be such that much of the water escapes over the surface. In this case, the amount of infiltration could be increased if the water could be ponded so that infiltration would proceed over a greater time interval. This process is called artificial recharge.

In some places the ground-water reservoir may be covered by impermeable material so that recharge is very slow. In such a case, it is possible to recharge the reservoir artificially by introducing water into it through wells or shafts.

Both methods are used successfully to increase the amount of water available from ground-water reservoirs in various parts of the country. However, because each ground-water reservoir has its individual characteristics, the procedures that are successful in one area may not be successful in another, and in the absence of an adequate background of scientific data it is not always possible to predict the scope or value of artificial-recharge experiments that might be undertaken. There is urgent need for experimentation and research designed to clarify the complex principles involved.

Artificial recharge by ponding or spreading water over the surface is practiced on the largest scale in this country in California. The outstanding example of artificial recharge through wells is on Long Island, N. Y., where in Brooklyn and Queens hundreds of wells receive water that has been used only for cooling. In this case it is not an impermeable layer over the aquifer that makes the use of wells necessary; it is the high land values and the impracticability of using sizable tracts for ponding. In the west basin near Los Angeles, Calif., the present seawater encroachment probably can be stopped only by means of artificial recharge along the coast. In some places the recharge can be done by water spreading or ponding; in others, however, a bed of clay lies over the aquifer and wells or shafts will be necessary. An analogous situation exists in the Grand Prairie region, Arkansas, where the clayey subsoil that makes rice flooding possible may make artificial recharge by water spreading impracticable. (See report prepared by Geological Survey and Arkansas Agricultural Experiment Station, Ground Water Supplies for Rice Irrigation in the Grand Prairie Region, Arkansas, University of Arkansas Agricultural Experiment Station Bulletin 457, June 1945.) Thus, if artificial recharge is to be practiced in this overdeveloped aquifer, it presumably will have to be done through wells or shafts.

In all cases, because of the generally high cost of artificial-recharge operations in relation to the value of the water for its intended use, it is necessary to base the operations on adequate scientific information so as to be able to design the most economical system; otherwise, artificial recharge may prove to be entirely impractical, or at least more costly than some alternate method of obtaining the needed water.

PROBLEMS DEALING WITH WATER IN BAUXITE MINES

Dr. WRATHER. The matter of the water in the bauxite deposits is receiving some attention at the present time. In other words, it is under study at the present time to see what remedial measures might be undertaken to reduce pumpage and to make those additional reserves of bauxite ores available for mining purposes.

Do you care to expand on that, Mr. Paulsen?

Mr. PAULSEN. I promised Mr. Norrell I would make a short statement about it.

The bauxite district of Arkansas, near the center of the State in Pulaski and Saline Counties, about 20 miles southwest of Little Rock, covefs an area of about 300 square miles and produces more than 90 percent of the bauxite ore of aluminum mined in the United States. The ore is obtained both by open pit mines and by underground mines. At present some of the companies are mining ore at depths of several hundred feet.

Flows of quicksand have prevented the mining of any ore from some ore bodies and have forced the abandonment of large ore bodies in some mines and in others have prevented the use of mining methods that will permit the maximum recovery of ore. A single sand flow has forced the abandonment of as much as nearly 1 million tons of ore, which is 1 percent of the entire reserve, and more than half of the total amount of ore mined in 1951. The total amount of bauxite lost because of these flows of quicksand is not known, but certainly it is a very large amount.

As the mines are deepened, the flows of quicksand become more common and severe. A large part of the reserve ore in the Arkansas bauxite district cannot be considered available until the flow of quicksand can be controlled. Representatives of the mining companies report that the biggest contribution that could be made to the bauxite mining industry in Arkansas would be a study that would lead to the control of the quicksand flows.

An investigation of the hydrologic conditions in the district may lead to a method of control of the quicksand. A beginning on such a study is proposed this fiscal year at an estimated cost of $3,000. We have started this fiscal year to make such an investigation with some degree of success, but it will have to be carried on a considerable while longer.

MINING HYDROLOGY

Mr. FENTON. What does the Survey do in mining hydrology that the Bureau of Mines cannot do?

Mr. PAULSEN. Well, I am not too familiar with what the Bureau of Mines is doing in the way of hydrologic research at some of the mines, but I do know we are doing some work, particularly in the Iron Mountain Range in Michigan that has helped the mining industries through the State very appreciably in determining the quantity of water, where it comes from and how it can be handled in connection with safe mining operations and for the redevelopment of mines that otherwise would have been abandoned. That work is being extended into rather critical mining areas where water would be a problem.

Dr. WRATHER. That is a field that is relatively new in our water studies, Dr. Fenton, in recent years, and the Bureau of Mines is concerned with underwater operations, which are the heart of the operation of a mine. Our work is directed toward the study of the entire water condition in an area to see whether water can be kept out of the mine and to keep the hazards reduced and to give the mining companies some idea of what they will have to handle.

Our work is not concerned with the Bureau of Mines' technologic work. It ties in more nearly with the type of work which we do in

evaluating underground water resources. The work offers great promise. For instance, in the zinc district in Pennsylvania there is an enormous water problem due to the water in the dolomites that lie over the top of the ore, and it has been a tremendously expensive process to develop shafting down through that water.

The same thing is true in Nevada where there is an ore body that lies below an enormous supply of water, and the water has to be kept out.

The water problem in Tennessee is serious, and we think we could do a great deal to help those conditions with the proper study of water conditions, which I think is valuable and which I think offers promise of some relief in the mining industry in securing ore that otherwise would be impossible to mine economically because of the enormous cost of handling that water.

I do not think the work is competitive with the work that the Bureau of Mines does.

RADIOACTIVITY OF WATER

Mr. FENTON. How does the Geological Survey work tie into the work of the Atomic Energy Commission and the Public Health Service on radioactivity of water? Are there duplications?

Mr. PAULSEN. No sir; there are not. Some work, of course, is financed by the Atomic Energy Commission and has to do solely with the elimination of atomic wastes. The Public Health Service, of course, also does work for the Atomic Energy Commission, but the two fields are entirely separate. However, we collaborate closely with the Public Health Service in many fields of operation where their work and our work come pretty close together, especially in the field of water quality.

Dr. WRATHER. There is some work going on there, Dr. Fenton, in the quality of water that is important. In other words, there is a certain amount of work being done to determine the amount of radioactivity in water. You have to know what the normal mineralization is because some of these streams have been carrying radioactive material, and they have been used without detrimental effect. But until you have a baseline from which you can calculate atomic waste, you have no ground for determining the degree of contamination which has been derived from atomic-energy plants. In other words, what we are trying to do is to get the background information from which to calculate the radioactivity so the cause can be accounted for and traced back to original cause. You will find that described on page 31 of the justifications.

BUREAU FIELD OFFICES

Mr. JENSEN. I have noticed your map which hangs on the wall shows that the United States is divided into a number of different sections. You do not call those different sections "regions"; do you?

Dr. WRATHER. No, sir. They have no reference to the distribution of water. They are merely convenient groups of States for this display purpose; the map would be too complex and illegible if such information were put on it for each State separately.

Mr. JENSEN. You do not have regional offices in those areas?

Dr. WRATHER. No, sir; they do not have regional offices. Our work, of course, is distributed far and side all over the country because

of the nature of it and the cooperation we have to maintain, which necessitates our maintaining a large number of outposts. Those are not administrative or organizational regions.

CHEMICAL QUALITY INVESTIGATIONS—SALINE WATER

Mr. JENSEN. I note on page 27 of the justifications under the heading of "Chemical quality investigations," you are asking for $426,000. It appears to me that this is a duplicating effort. You are not duplicating these services, but the Bureau of Reclamation is attempting, I believe, under the law, to duplicate the things you are trying to do by searching for a method to take the chemicals, minerals, and foreign matter out of water to make it usable for human consumption

We passed a law last year which provided there should be $2 million spent in the next 5 years to investigate the possibility of desalting and demineralizing water of all kinds to make it usable for irrigation and human consumption.

I might tell you that a supplemental request was made last year for $400,000 after that law was passed. The House took no action and the Senate put in $125,000. The Bureau came before the committee the other day with a supplemental request for $275,000 more that they wanted to use in fiscal 1953. The committee allowed them $50,000 more. We were not at all convinced that the program is going forward in a manner that would justify the $275,000, and some of us questioned the justification for even spending $50,000 in fiscal 1953. Now they are coming before the committee again and have asked for $400,000 for fiscal 1954.

I know it is duplicating to some degree, but my question is, in your organization, with the knowledge you have of the water of this Nation and the experience you have had over these many years, is not your agency, the Geological Survey, best suited to handle this entire matter? You have been getting appropriations for a number of years for this very thing that we are being asked to spend money for. I presume you have worked on this problem for years.

Dr. WRATHER. So far as technical personnel is concerned, I think we would be capable of handling that type of problem. You realize in the past the areas of unusable water have been more or less overlooked because of the pressure to find water that can be used immediately. There has been a lack of study of these saline waters, waters that are just slightly over the limit of usability.

Now, with the increased pressure for additional water supplies, it becomes necessary to go back and look at these areas. The areas which offer the most promise are those areas which are just beyond the range of usability. There are known to be considerable areas throughout the West of water of that character. It is true that up to the present time the expense of desalting water has been so great that it is not advisable except in small amounts. You are quite aware of the efforts of the Navy during the war in taking salt water and purifying it of its mineral content for naval use and for military use. Those are expensive operations. There are some new techniques which are known, but which I do not think have been fully evaluated, and they are quite expensive.

There is always the hope, with the further knowledge we will gain, that we will be able to cut down the cost and make a greater amount

of water available. I think that work is related to the type of work and the investigations we have done in water.

Does that answer your question?

POSSIBILITY OF TURNING THE SALINE WATER PROBLEM OVER TO GEOLOGICAL SURVEY

Mr. JENSEN. Yes; it does, Dr. Wrather, to some degree, but what I am trying to ascertain is this: Is it not a fact that the Geological Survey, so far as any Federal agency is concerned, has spent more time and has more already skilled men in the art of purifying water and has gone further into the problem than any other Federal agency?

Dr. WRATHER. We have done much work in determining the amounts and nature of minerals carried in the surface and underground water supplies of the country and have given thought to some of the problems of ameliorating their effects.

Mr. JENSEN. So it appears to me that we have set up a duplicating organization within the Government to do the very thing that the Geological Survey has been doing for years. I think we are on the wrong track. I certainly feel we should turn that job over to the Geological Survey. In fact, I made a recommendation to the members of the Public Lands Committee to hold further investigations and further hearings on this saline-water problem and to try to come up with the answer. I have asked them if they would not consider turning this whole matter back to the Geological Survey, and I am in hopes that they will have such a hearing and, if they do, no doubt they will call before the committee you and your men who have had much experience in this line.

You have made some progress, have you not, Dr. Wrather, in this problem of demineralizing water and making it usable?

Dr. WRATHER. I think we understand what the problem is. We have not gone into it to any great extent up to the present time, but we have participated as one of the groups in the Interior in the consideration of this matter which is now in their hands. We have had men sitting in with them in an advisory capacity during the progress of this work and, of course, it is a matter for Congress to determine as to who does the work. All I can say at the moment is that I think we are qualified to handle that kind of work.

Mr. JENSEN. I believe you are, too. I believe you are better qualified by far than any other agency of the Government.

Dr. WRATHER. Of course, Congress lays down the line of authority as to what shall be done; they have the power of authority in deciding these things, and we try to live up to them to the very best of our ability.

CAPITAL OUTLAY FOR BUILDING SPACE

SCATTERED OFFICE SPACE IN THE DISTRICT

Mr. JENSEN. I understand that the office space of your department is scattered all over town. In how many different places do you have offices?

Dr. WRATHER. About 15 places, I think it is.

Mr. JENSEN. Have you made any recommendation or do you want to make any recommendation along that line?

Dr. WRATHER. We discussed the matter somewhat during your absence this morning, Mr. Jensen, in which we reviewed or made a

kind of progress report on what our space situation is at the present time. We are in a very bad state, particularly in the metropolitan area of Washington. We have endeavored to the very best of our ability to get a more rational setup. It is true that a very large part of our work need not be done in downtown Washington, and it can be done more efficiently in a place on the outskirts of Washington. There is a great deal of it which we cannot remove far from Washington because of the necessity for close integration with activities of the other Departments of the Government as evidenced by the large amount of assignments which we have.

PROPOSED SOLUTION TO THE OFFICE SPACE PROBLEM

Mr. JENSEN. What is your solution?

Dr. WRATHER. The solution, as I see it, is a building definitely for Survey use, which will be suitable to our needs and which will lie on the outskirts of Washington, where it will be possible to maintain contact and liaison with other Government groups and where we can plan a more orderly conduct of our affairs. I feel that it is a great loss and a waste of public funds to have to do business as we are now having to do it.

Mr. JENSEN. I am sure it is.

Dr. WRATHER. We are not masters of our own destiny, because we are obliged to occupy office space and such other available space as is provided us by the General Services Administration. The only way I can see to cure that situation is to get a building of our own, designed for our use, where we can have some feeling of stability and security rather than being continually broken up into small segments and forced to go wherever we can find driblets of space to occupy.

Mr. JENSEN. We know, of course, that your agency will always be a part of the Government, and it plays a very important part. It plays a great part in our civilian as well as our military life. So I would welcome, as one member of this committee, your recommendations. I will even go so far as to welcome a definite building program.

Dr. WRATHER. To date we have considered this project primarily in the light of rented space. We have found by investigation with private interests that they are willing to construct a building according to our needs and that we can pay for it in rentals which will be less than the cost of the space we now occupy.

Mr. JENSEN. And it would be much more efficient.

Dr. WRATHER. Yes, sir. We now occupy in Washington about 397,000 square feet of space, all told, in these various places.

OFFICE SPACE COSTS

Mr. JENSEN. What does it cost per year?

Dr. WRATHER. I cannot give you that figure. I would have to obtain that for you.

Mr. JENSEN. Put it in the record. Put into the record a statement that would show us as best you can why a building owned by the Government would pay for itself over a period of so many years.

Dr. WRATHER. That offers this difficulty, Mr. Jensen. We would have to place an arbitrary value on the occupancy of space now owned by the Government, and it is difficult to make that evaluation.

Mr. JENSEN. I know, but you can come rather close to it.

Dr. WRATHER. I think Mr. Mowitt can suggest some figures.

Mr. MOWITT. We have made an estimate of the annual rental value of all the space we now occupy. Taking into consideration the rent we pay commercially and the rent that the Government would be relieved of if it relinquished rental space downtown and moved into the Government space we now occupy, we have arrived at a figure of around $900,000 a year.

Mr. JENSEN. $900,000 a year?

Mr. MOWITT. Yes, sir; for the 397,000 square feet.

Mr. JENSEN. Have you estimated approximately what the cost of the building would be?

Dr. WRATHER. No, sir; we have not gone into that question. As I say, our consideration to date has been primarily in having a building constructed by private industry according to plans which we would submit, which building would be occupied on a rental basis. We feel that we can obtain space at a square-foot rental which will be a great saving to the Government. It would not involve the necessity for a Government-owned building unless pending legislation is passed which would, where advantageous, permit Government ownership through exercise of a recapture clause.

Mr. JENSEN. Do you know, Dr. Wrather, about how many square feet of space you need?

Dr. WRATHER. About 440,000.

Mr. JENSEN. It is no difficult job or impossible job for a good contractor to tell you within 10 percent what a building of that size will cost.

Dr. WRATHER. We can get those figures.

Mr. JENSEN. I wish you would get those figures and send them to the clerk. The chances are we cannot get it done this year, but I think this committee should have that information. If you will get those figures and a statement as to why you feel this would be the best thing you could do both from an efficiency standpoint and from a financial standpoint, I would appreciate it.

Dr. WRATHER. Do you want that for the record?

Mr. JENSEN. Yes, sir. Without objection, I would like to have that placed in the record.

(The matter referred to is as follows:)

In accord with the best information we have been able to obtain from commercial and Government sources we believe it would be more economical for the Government to lease-purchase than to construct, if all factors are considered.

On a 25-year-lease basis, a building such as the Geological Survey contemplates could probably be obtained for an annual payment of $1,250,000 with the option to purchase for $1 at the end of the lease. The total cost to the Government for the 25-year period on this basis would be $31,250,000. The total cost for a similar period assuming Government construction, and an annual interest on the investment of 2½ percent with amortization of the principal in lieu of depreciation, would be $27,100,000.

These costs, however, ignore such factors as the cost of keeping the Government building in usable condition and the loss from taxes, both Federal and local, from the privately financed construction. Operating costs are assumed to be the same under both plans, and in both cases the building can be assumed to have reached its half life at the end of 25 years.

EQUIPMENT FOR SHALLOW-HOLE DRILLING

Mr. JENSEN. A few years ago we had some problems which confronted this committee regarding cooperative well drilling for municipalities. I would like to know how that program is going now.

Dr. WRATHER. I think it is going along satisfactorily. I think we have leaned over backward to maintain our agreements with the well-drilling industry of the country. We are not interested in drilling wells with Government-owned equipment if it can be satisfactorily contracted. There is only one minor problem that has come up lately, which we would like to discuss with you, and that is that there is a great need for our acquiring some shallow auger hole drilling equipment to obtain information from shallow holes not to exceed a depth of about 100 feet and a diameter of the hole of 4 or 5 inches. In other words, we need equipment which can be moved from place to place. At the present time we have a great need for such equipment for use in a program in Louisiana in which they are endeavoring to find the answer to a recharge problem in a rice-growing district in Louisiana. We need equipment of that sort, which we do not consider drilling equipment, with which we can quickly obtain information of that sort and analyze it to see what the possibilities are for water recharge. When we are through with it in one area we could move it to some other area.

Mr. JENSEN. This machine would be entirely for your own use?

Dr. WRATHER. Our own use entirely and merely for the purpose of acquiring information.

Mr. JENSEN. How much would such a machine cost?

Mr. PAULSEN. A totally equipped machine of that kind with power would cost about $4,000.

Dr. WRATHER. It is the type of equipment that is used in shothole drilling in oil exploration. It is entirely portable and standard equipment.

Mr. JENSEN. Certainly I can see the great need for a machine of that kind. And it would expedite your work; would it not?

Dr. WRATHER. It certainly would expedite our work. We would not use drillers on it. It is the type of equipment that is commonly used in shallow exploration. We are just merely trying to get information as cheaply as we can. It cannot be construed in any manner as being a drilling operation. It is merely an auger hole—a shallow hole—to determine the information which we have to have to solve some of these water problems.

Mr. JENSEN. Now, does the machine do this?

Dr. WRATHER. We have not done anything about it.

Mr. PAULSEN. We have been doing it by handwork in part, which is slow and expensive.

Mr. JENSEN. What do you mean by handwork?

Mr. PAULSEN. A hand auger.

Mr. JENSEN. How far down in the ground do you go with the hand auger?

Mr. PAULSEN. In certain kinds of material we can go down 40 to 50 or more feet.

Mr. JENSEN. That is if you do not run across hard rock?

Mr. PAULSEN. It is a very cumbersome and very slow operation, and the thing can be done much more expeditiously with power-driven equipment.

Mr. JENSEN. You have a big problem in finding underground water; have you not?

Dr. WRATHER. Yes, sir.

Mr. JENSEN. That is, for irrigation and human consumption?

Dr. WRATHER. Yes, sir; and for industry.

Mr. JENSEN. And you can buy this machine for around $4,000?

Dr. WRATHER. Yes; for four or five thousand dollars, which I think is the cost of the machine that we would utilize for that purpose. It is really for the purpose of obtaining information which is vital in solving some of these shallow-water problems.

Mr. FENTON. Do you not have the same problem with other machinery that you need, too? Do you have any antiquated machinery that you can modernize in other phases of your work in geology?

Mr. PAULSEN. Speaking of the water end of it, we are doing test drilling by contract for the deeper holes and for specific jobs we contract that work with regular well-drilling concerns, which works all right and which we would always do. We do not want to do our own drilling even for test purposes, except for augering shallow holes.

PERSONNEL

POSSIBILITY OF REDUCING STAFF

Mr. JENSEN. I have just one more question. While this committee wants to give the Geological Survey everything it needs that will help you to do the great and important job you have to do, and which is your responsibility, we always, of course, are hopeful that by new methods and by possibly a little reorganization we can save a few dollars here and there.

Do you have any suggestions as to how you can make your agency more efficient with possibly less personnel and how you can consolidate some of your activities? If there is anything that you can think of that might save some dollars for the taxpayers and will permit you to carry on this great and important work we would like to know it.

Dr. WRATHER. Mr. Jensen, I am afraid it would be going into too great detail to mention all these things. However, that problem is continuously before us as to how can we short cut and do a good job with less money and with less personnel.

This whole business of trying to consolidate our activities in four major centers, which I mentioned this morning, is part of that program. We do not call them formal regions, because they are service centers at each of which we gather together all the equipment we have to use and there pool the business services of the Geological Survey for a large area. For instance, in the Rocky Mountain area the center is at Denver, and in the San Francisco Bay region, on the Pacific coast, it will be at the Palo Alto center.

We are doing that because we do not feel that we are justified in spending public funds for duplication of facilities. We want to get

along on the least possible amount of capital investment and to keep it fully employed all the time. In other words, we have no desire at all to buy expensive testing equipment of one sort or another and then use it only part of the time. We are trying to adjust our business so that we can get any necessary equipment we need and arrange to use it in a businesslike way, and keep it fully occupied and get every possible dollar's worth of benefit out of it.

The whole matter of management improvement is a conscientious effort on our part in which we are endeavoring to utilize the number of personnel we have to the best advantage, to get the job done and to get it done as efficiently as we know how to do it.

ADDITIONAL PERSONNEL REQUESTED

Mr. FENTON. Are you asking for more personnel for 1954 than you had in 1953?

Dr. WRATHER. In the expanded activities represented by this budget request, if approved by the Congress, there will be the necessity for employing some additional personnel, but we feel that they are justifiable, and we will be able to make justifications that would permit the acquisition of any additional personnel we need.

Mr. FENTON. Will you put a short, concise statement in the record showing just how many extra people you have asked for and why?

Dr. WRATHER. Yes, sir.

Mr. FENTON. And the additional amount it will cost.

Dr. WRATHER. I think that Mr. Stearns can make that up for you.

Mr. FENTON. All right.

(The matter referred to is as follows:)

Geological Survey employment

	Actual Jan. 31, 1953	Estimated, fiscal year 1953	Estimated, fiscal year 1954	Requested increase (+) or decrease (−)
Total number of full-time employees engaged on programs financed by—				
Direct appropriation and reimbursements	4,585	4,796	5,542	+746
Working funds and allocations from other agencies	1,982	2,351	2,215	−136
Total	6,567	7,147	7,757	+610
Average number of all employees, including part-time and temporary, engaged on programs financed by—				
Direct appropriation and reimbursements	5,479	5,375	6,160	+785
Working funds and allocations from other agencies	2,190	2,396	2,259	−137
Total	7,669	7,771	8,419	+648
All personal services:				
Direct appropriation		$17,185,000	$20,685,000	+$3,500,000
Reimbursements		5,267,000	5,175,000	−92,000
Working funds and allocations from other agencies		10,826,600	9,773,000	−1,053,600
Total		33,278,600	35,633,000	+2,354,400

An average of 65 to 70 percent of the expenditures of the Geological Survey are for personal services necessary in the conduct of the programs of investigations and mapping. Of the increased manpower proposed for fiscal 1954, approximately two-thirds will be required by the expanded topographic mapping program. The proposed increase in average employment is as follows:

	1953 estimate	1954 estimate	Increase requested
Topographic surveys and mapping	3,173	3,614	441
Geologic and mineral resource surveys and mapping	1,931	2,067	136
Water resources investigations	2,189	2,218	29
Soil and moisture conservation	7	16	9
Classification of lands	56	66	10
Supervision of mining and oil and gas leases	188	205	17
General administration	227	233	6
Total	7,771	8,419	648

Water Resources Investigations

TYPE OF WORK DONE IN STATE-COOPERATIVE WATER INVESTIGATIONS PROGRAM

Mr. Fenton. Just one more question, Doctor, on the matter of these water-resources investigations, relating to the Federal-State program. We know that the States are cooperating pretty well on that 50–50 cost proposition.

Now, would you mind giving us for the record some specific examples of the kind of work that is done in State cooperative water investigations.

Mr. Paulsen. Dr. Fenton, I think perhaps the committee knows that we are cooperating with every State in the Union and with the Territory of Hawaii on a 50–50 cooperative basis. The cooperation has been increasing constantly year by year, and during the last few years the amount of State cooperative funds made available for matching purposes has increased on an average of about $200,000 a year, and that is what we estimate will be the increase in 1954 over 1953.

Now, the programs in the various States do vary to some extent.

In the West, naturally, the primary interest relates to water for irrigation. In many of the States it relates to ground water for supplemental irrigation, and quality-of-water investigations in connection with the determination of the chemical quality of the water. The more the water is used and reused, the more saline it becomes, and that is becoming quite a problem in many of the Western States.

In the East also the cooperation covers both surface and ground-water investigations. It is not exactly equivalent in every State, but it is becoming more so everywhere because the requirements for water supplies from both sources are paralleling each other, and along with that, of course, is involved chemical quality of both surface streams and ground-water supplies.

Also sediment problems are becoming important in many States such as in the Missouri River Basin, the Rio Grande Basin, and the Colorado River Basin, and even in some of our eastern streams.

As you know in the case of the Schuylkill River, during the cleaning-up process under former Governor Duff we carried on investigations of quality of water, and surface-water investigations in the Schuylkill Basin all during that program. We are still carrying on some of the work on a continuing basis because the job is not completely done yet. There are many other areas of that kind where the quality of water and sediment are becoming more pressing.

Mr. FENTON. It seems to me I heard that job was being phased out on the Schuylkill

Mr. PAULSEN. You mean as far as State participation is concerned?

Mr. FENTON. As far as the Geological Survey is concerned.

Mr. PAULSEN. It has decreased, but it is still being carried on on a cooperative basis with State agencies, but on a much reduced scale.

Dr. WRATHER. It varies considerably from State to State. For instance in Arizona where you have those desert areas to deal with, with the continued use of water going on down the river it gets more salty as you go down the river, and quality is a very important thing.

Mr. PAULSEN. And sedimentation is also very important.

Dr. WRATHER. A study of the chart there will show the great variation in the amount of sediment work being done in different areas. The sedimentation is the second column or bar to the right there.

Mr. PAULSEN. This column [indicating on map] is quality of water; this is ground water, and this is surface water work.

Mr. FENTON. B is sedimentation?

Mr. PAULSEN. Yes, sir; that is correct.

Dr. WRATHER. Sedimentation is an enormous problem in the Colorado River, and yet on the Columbia you do not have the same type of problem, and the amount spent on sedimentation is very much less.

Mr. PAULSEN. In New England there is practically none.

Dr. WRATHER. Yes; in New England there is practically none; it varies widely within limits.

Mr. FENTON. That is going to be a problem out there in the Arizona area.

SEDIMENTATION STUDIES

Dr. WRATHER. One of the most interesting studies we have done in a long while is the sedimentation study on Lake Mead, which I think is a milestone in deciding what can be expected of a stream carrying that enormous sediment load that the Colorado River carries. Now, we have some concrete figures on the rate of sedimentation there.

Mr. FENTON. What can we do about it?

Dr. WRATHER. Not much, except that we can pretty well decide what the life cycle of a reservoir is going to be. It is not so much the reservoirs that you already have because they will hold sediment for a certain number of years. I believe we can do a great deal more to determine the life cycle of one of those reservoirs than we have ever done in the past. I think it is a very important part of the program of river-water studies.

Mr. PAULSEN. As far as the Colorado and Lake Mead are concerned we do know where the principal amounts of sediment come from, so that land-management groups and others having to do with land management can concentrate on relatively small areas as sources of sediment.

Dr. WRATHER. I would like to say this again, which I have said repeatedly to this committee, that the type of investigative work at Lake Mead and at Lake Hefner in Oklahoma, and similar studies that we are doing now on streamflow, are among the greatest contributions that we can make to the whole field of hydrology because it leads to a better understanding of what is taking place. That all has to be financed out of Federal funds.

In other words, the States want all of their cooperative money spent on projects which are of immediate benefit and use to the States, but these investigative and research projects which I have mentioned are projects which we have to finance out of our own funds, and therefore we have always felt the need for more unrestricted funds in our Federal program in moving into some of these fields where we see the need is greatest for a better understanding of the whole water problem.

Mr. FENTON. What are some of the factors entering into sedimentation?

Dr. WRATHER. For instance, there is always an interrelationship between surface streamflow and underground water sources. We have a research project going on now in the Bozeman Valley in Montana in which we have a peculiar and interesting combination of circumstances. Three or four branches of the Missouri come together in that area. We can pretty well determine the amount of rainfall of the area, and we can pretty well determine the water used for pumping out of the ground for beneficial use. We can get information which will enable us to evaluate what becomes of the water falling on the ground, to determine how much might be salvaged, and the interrelationship between surface water and ground water.

That is merely typical of the kind of investigations which I think we ought to be conducting on a larger scale than we have ever been able to conduct them yet. We are doing all of that work we possibly can do, trying to live up to that function, but I would like to have the sympathetic understanding of the committee that we do need unearmarked funds which we can allocate, and by which we can assure that this work is carried on continuously until we can get some kind of results. Sometimes they require 4 or 5 years' time, because time is of the essence. I believe those things are extremely valuable and we are very anxious to build up our facilities to more adequately fill that field.

SILTING IN LAKE MEAD

Mr. FENTON. Without delaying the hearings unnecessarily, I believe several years ago one of your people estimated the amount of silt now in Lake Mead.

Mr. PAULSEN. We have that.

Mr. FENTON. What is the depth of that silt now?

Mr. PAULSEN. It varies very widely throughout the lake. Near the dam the depth of the sediment is about 100 feet. It varies in different parts of the lake. Lake Mead is some 120 miles in length.

The coarser material is deposited at the upper end of the lake, and in places it is reasonably deep as it goes down through the reservoir and the finer material is deposited closer to the dam and much of that is as much as 100 feet deep.

We have a quantity analysis of the whole thing and our report is the first of this type. It will appear soon for administrative use, at least, and it will be out for general use in the next few months.

Mr. FENTON. How much are you asking for this desilting work.

Dr. WRATHER. It cannot be identified exactly in the breakdown here.

There is a certain amount of investigative work that we do in connection with some of the projects listed here as separate items.

I am totally unable to tell you offhand just what percentage of our present funds is being used for strict research, because if part of the

job is devoted to research you still have the practical matter of determining the amount of water available in that area while picking up the facts for research. Some projects will be set out strictly as research projects, divorced from the regular objective of immediate water supply, we will say.

Mr. FENTON. Thank you, Doctor.

STATE AND MUNICIPAL APPROPRIATIONS FOR COOPERATIVE WATER INVESTIGATIONS

We will insert page 33 of the justifications in the record at this point, showing the State and municipal appropriations for cooperative water investigations.

(The matter referred to follows:)

State and municipal appropriations for cooperative water investigations

State	1953 estimate	1954 estimate	State	1953 estimate	1954 estimate
Alabama	$95,000	$105,000	New Hampshire	$17,000	$17,000
Arizona	110,000	120,000	New Jersey	67,500	70,000
Arkansas	51,000	51,000	New Mexico	122,500	105,000
California	275,000	260,000	New York	233,000	275,000
Colorado	45,000	50,000	North Carolina	70,600	71,000
Connecticut	20,700	21,000	North Dakota	32,500	33,000
Delaware	22,000	24,000	Ohio	152,000	148,000
Florida	145,000	162,000	Oklahoma	75,000	75,000
Georgia	48,000	49,000	Oregon	54,800	55,000
Idaho	55,500	56,000	Pennsylvania	115,000	115,000
Illinois	75,000	60,000	Rhode Island	16,200	17,000
Indiana	90,000	100,000	South Carolina	27,000	27,000
Iowa	85,000	90,000	South Dakota	8,500	9,000
Kansas	52,800	53,000	Tennessee	70,000	75,000
Kentucky	155,000	155,000	Texas	325,000	220,000
Louisiana	95,000	70,000	Utah	98,000	99,000
Maine	10,500	11,000	Vermont	11,700	12,000
Maryland	78,000	78,000	Virginia	75,000	80,000
Massachusetts	45,000	50,000	Washington	115,000	110,000
Michigan	95,000	95,000	West Virginia	23,000	23,000
Minnesota	50,000	50,000	Wisconsin	33,000	35,000
Mississippi	25,500	26,000	Wyoming	50,000	52,000
Missouri	26,000	27,000	Hawaii	83,000	83,000
Montana	29,500	30,000			
Nebraska	70,000	75,000	Total	[1] 3,750,000	3,700,000
Nevada	25,200	26,000			

[1] The difference of $250,000 between this total and the amount appropriated for the Federal share is the result of a few State agencies financing more than half the cost of cooperative investigations, and this situation is not expected in 1954.

AVERAGE GRADE OF BUREAU POSITIONS

Mr. BUDGE. Doctor, first I would like to state that I have been very much impressed by the testimony of you and your staff. I think your approach, particularly, to the economic questions has been excellent.

Dr. WRATHER. Thank you, sir.

Mr. BUDGE. To me it has been very refreshing.

Dr. WRATHER. Thank you.

Mr. BUDGE. I would also like to compliment you on this, and I do not see how you were able to do it when you have so many scientific and professional personnel in your Agency: I note that your grade classification in this budget is to be reduced from 6.6 to 6.5. I think you are doing a good job to keep within those grade classifications in view of the type of personnel that you have in your Agency.

There are a few questions that I would like to ask.

Accuracy of Ground Water Studies

I think I will direct this one to Mr. Paulsen. Can you give us a statement as to the accuracy of your ground-water studies, how accurately you will be able to determine the amount of ground water in a particular area when you complete your studies?

Mr. Paulsen. On a quantitative basis?

Mr. Budge. Yes.

Mr. Paulsen. I do not think I could do that on a percentage basis, but I think in a comprehensive investigation we can determine the amount of water that is recoverable from an economic standpoint within close limits.

Mr. Budge. In other words, you feel that after you complete a comprehensive study you can say just how much water there is in the ground and in a particular area, as you could for coal or iron.

Mr. Paulsen. Yes, pretty much so.

Dr. Wrather. By making a comprehensive series of drill tests and pumping tests, and so forth, we feel that, within quite narrow limits, we can say what the underground aquifer is capable of sustaining. It is obvious from many of these studies that many of these underground aquifers are being depleted by pumping far greater than the amount of the recharge.

Mr. Budge. That is particularly true in the Southwest?

Dr. Wrather. Yes, that is particularly true in the Southwest. In the case of ground water that is not being replenished to any degree that has been true for a long time. Now, if the public is made aware of that situation, there is the possibility of avoiding an enormous loss in the national economy—that is, if people can be convinced of the fact that they cannot pump indefinitely. We have a problem of that sort in the Southwest in which there is an enormous amount of pumping, the water coming from an enormous reservoir, but where the withdrawal is greater than the amount of replenishment of the water, and they are headed for a fall in the course of time.

Mr. Budge. If your studies can be accurate then, of course, the pumping for economic reasons would be limited to the amount of the annual yield?

Dr. Wrather. Yes.

Mr. Paulsen. There are two problems, as Dr. Wrather has mentioned.

We can determine quite accurately the amount of the underground recoverable supplies if we have enough test drilling done.

Now, the question of the perennial recharge is a little more difficult to answer for the reason that the amount of natural recharge not only varies from year to year, but varies from decade to decade. Our records are not long enough to fully analyze the situation over a long period of years.

For example, in central Arizona and southern California we have a pretty fair estimate of what the capacity of those ground-water reservoirs is.

We know that better in some regions than we do the certain yield, or the safe yield as some people call it.

In southern California we will have a drought period sometimes extending 10 years, but perhaps in 1 year the groundwater aquifers will become recharged enough to carry the same area, for pumping

purposes, for another several years. Our problem now is that with the tremendously increased use of water in all places they are now pumping more water and you cannot determine what the average pumping will be from year to year.

Mr. BUDGE. Yes, I see that.

Now, when you refer to an underground reservoir, would that also include underground streams that need a tremendously large reservoir, or are you speaking of a pool such as that in which you find oil?

Mr. PAULSEN. No, sir, just the water available in the geologic formations, some of which may be pretty tight, but in the case of others such as limestone there will be many small pores or even large crevices.

Mr. BUDGE. But you have not counted the flow of water underneath the ground, have you?

Mr. PAULSEN. Yes. For example, there is a good illustration through the Arco area in Idaho.

We know, roughly, that there is about a 4,000 second-feet of flow through the underground formations there continuously at varying depths. That is determined by a knowledge of the general hydrology of the region and research from the various sources there, such as rivers and various creeks, and water coming from the North Fork of the Snake River.

Mr. BUDGE. You feel that even though it is a flowing stream, rather than a pool, that you can accurately, with your present studies, determine the amount?

Mr. PAULSEN. Yes, sir.

Dr. WRATHER. That is, you can determine it within limits; you cannot do it accurately.

Mr. PAULSEN. Even there the flow is so slow that normally you would not call it flowing water. It probably takes the water several years to get through that 50 to 100 mile stretch.

WORK PERFORMED FOR FEDERAL POWER COMMISSION

Mr. BUDGE. Now, Doctor, going back to my question of this morning, I am curious to know just what this service is that you perform for the Federal Power Commission relative to power permits and licenses?

Mr. PAULSEN. When the Federal Power Commission was established in 1919, I believe, the Geological Survey was called upon to determine the amount of water on sites of those who applied for Federal Power Commission permits, or those who were in trespass on Federal land, as to the value of the power site or a power development on the basis of the annual quantities of water there. So, the arrangement made with the Federal Power Commission is, and, as a matter of fact, it is part of the regulations, that we are expected to determine the quantities of water passing each of those Federal Power Commission projects. This we do, but that work is charged to the permittee or the licensee, and those are the figures you see for that work.

Mr. BUDGE. Does not the Bureau of Reclamation, to an extent, do about the same thing?

Mr. PAULSEN. No; I do not think so, not with respect to Federal Power Commission permittees and licensees.

Mr. BUDGE. I know that they maintain stations all the way along streams to determine the flow of them.

Mr. PAULSEN. No, sir. Although the Bureau of Reclamation does maintain certain gaging stations there are not very many of them any more. We operate practically all of the gaging stations.

In Idaho I doubt very much if the Bureau of Reclamation is operating a single station except at their own internal canal headings for their own operation.

Mr. BUDGE. Well, I will not follow that any further.

EFFECT OF SILTING ON USEFUL LIFE OF HIGH DAMS

I have just one more question, Mr. Chairman, and this really intrigues me: Suppose now that Lake Mead, with all of the other large structures we have placed across the river, including Hoover Dam, Boulder Canyon, Grand Coulee, and the rest of the dams that have done so much for the West, suppose that they fill up with sediment completely, then what is the end result, how will that water ever be released?

Mr. PAULSEN. We hope that will never happen. Certainly it will not happen, so far as anybody knows, at Grand Coulee. Lake Mead, Hoover Dam, and Boulder Dam are quite different matters, and this study we have recently completed and will have a report on, shows that, without any changes in the upper basin or without any additional dam sites upstream from the Hoover Dam, it will be a long, long time before that reservoir fills up.

Dr. WRATHER. What is the estimate on it?

Mr. PAULSEN. It varies. We have a half-dozen different analyses on it, and I am hesitant to put them in the record, but without any remedial measures upstream, or additional dams being installed I think you can safely say that the life of the reservoir would be over 200 years.

Mr. BUDGE. So this committee will have later before it corrective measures proposed by the Bureau of Reclamation. What would you say would be the result, whenever this time arrives; would you just have a plain there?

Mr. PAULSEN. We would always have a dam, Hoover Dam would not lose all its value as a power site, but as to that reservoir if and when Lake Mead fills up with sediment, it would, of course, reduce its value tremendously, unless there are other reservoirs built up stream that would take the place of the present Lake Mead. That has been the fear and some of our prominent engineers have estimated that Lake Mead would fill up in about 60 or 70 years.

Mr. BUDGE. There has been testimony before committees of Congress to that effect.

(Discussion off the record.)

Mr. PAULSEN. There is one joker, or one uncertainty in our present information, and that is that since the closing of Hoover Dam our stream flow has not been nearly as high in the Colorado River as it was earlier. Our records are not too adequate, not going back more than about 30 years, but we have evidence of much higher streamflow in the early 1900's than we have had since we obtained quite accurate information on the streamflow at various key stations on the Colorado River, commencing about 1927.

Now, one big flood, an unusual flood which we have not had during the last 30 or 40 years, could throw as much sediment into that reservoir as has been accumulated ever since 1937. That is the uncertainty about it.

Soil and Moisture Conservation

Mr. Fenton. We will take up the item for moisture conservation. The appropriation for 1953 was $43,700, and for 1954 you are requesting $100,000, or an increase of $56,300.

Is this amount necessary or required to meet existing requests for assistance from other bureaus, or does it anticipate possible increased requests?

Dr. Wrather. This item represents services which we render to various agencies in the Department of the Interior who administer the public lands, for instance, the Bureau of Reclamation, the Bureau of Land Management, the Indian Service, and so forth—in handling soil and moisture problems, water for stock on Indian lands, and water relating to grazing problems arising in the Bureau of Land Management. It deals with the land administration solely under the Department of the Interior; it is not the same as the soil and moisture program in Agriculture, which is a very large item.

Mr. Paulsen, I think, can answer any questions you may have with regard to the item.

Mr. Paulsen. Dr. Fenton, in further answer to that question, the Chief of the Bureau of Land Management, and the Indian Service have written us fairly recently asking that the funds for soil and moisture program be increased much more than we have recommended, because of their dire need for basic information, so that they can plan their own programs and projects.

The $43,000 that we have now, and have had for the last few years, hardly scratches the surface of what is really required. It will only take care of a minor number of the new requests that we have received.

Mr. Fenton. I notice the justification here touches on that. You have received inquiry from the Bureau of Land Management for a stepped-up program. As Dr. Wrather said, this item is certainly a major item in the agricultural program.

Dr. Wrather. Yes.

Mr. Fenton. With 282 million acres of land under the jurisdiction of the Department of the Interior, I am just wondering what you can do with that amount of money.

Mr. Paulsen. We can do quite a lot. The work is handled primarily from the Salt Lake City office. Of course the work is performed mostly in the Western States, including the Dakotas. It also involves the Bureau of Reclamation.

The Department of Agriculture has an interest in it, in some cases. We are able to coordinate, you might say, our research activities with the work that is being carried on by the bureaus in the Department of Agriculture. This is a very small program, as compared to the requirements and needs with respect to taking care of 282 million acres of public land under Interior's stewardship.

Mr. Fenton. Do the Bureau of Land Management and the Bureau of Reclamation contribute somewhat to your appropriation?

Mr. PAULSEN. Yes, in some cases they do. We do not get very much money transferred from either of those bureaus for that kind of work. Compared to what we receive, they have a rather large fund for action programs in developing areas.

Mr. FENTON. Yours is really research?

Mr. PAULSEN. They are not doing any large amount of work without advice from our smaller group, who have been working on this soil and moisture program. They are relying more and more upon the work we do.

SPECIAL AREA WATER SUPPLY STUDIES FOR NATIONAL SECURITY AND RESOURCES BOARD

Mr. PAULSEN. Dr. Fenton, there is one matter that the committee may have some interest in. Since the Korean war started, the National Security and Resources Board and the Munitions Board have been quite concerned about the adequacy of water supply in many of the big, new industrial areas. That is true also of the National Production Authority.

Mr. FENTON. Yes.

Mr. PAULSEN. So that there is a project to prepare reports on critical areas. The National Security and Resources Board has given us a list of areas numbering 29 that we have been working on in the last year and a half. We are getting out a rather comprehensive report covering those areas, and publishing them as Geographical Survey circulars. We are covering those areas, one by one, as fast as we can get to them.

We understand that instead of 29 of these critical areas being sufficient to take care of the present needs, the National Security and Resources Board and the National Production Authority would like to have that increased to 79.

We have already completed such reports, and have published them for about 7 or 8 of the areas. They are being used rather extensively in those particular areas.

Those that we have already completed include Bucks County, Pa., where a finished-steel plant is being constructed.

Mr. FENTON. Morrisville.

Mr. PAULSEN. Our engineers are consulted for background information needed largely in the selection of the sites and development of a water supply.

We have completed similar reports for the Detroit, Mich., area; the Youngstown area; the Atlanta, Ga., area; the Erie, Pa., area; the Buffalo, N. Y., area; the St. Louis, Mo., area; and reports are now in progress for the Rochester, N. Y., area; the Milwaukee, Wis., area; Pittsburgh, Pa.; Minneapolis-St. Paul, Minn., area; Indianapolis, Ind., area; Kansas City, Mo.-Kans., area; Birmingham, Ala.; Louisville, Ky.; Wheeling-Steubenville, W. Va. and Ohio.

Those reports are now being worked on, and we hoped to complete them within the next several months.

In addition to that kind of work we are also determining, for the critical defense agencies, the water requirements for certain basic products, such as paper pulp, aluminum, phosphate, petroleum, and so on, and we have already completed a report on the water requirements for paper pulp and aluminum, and are now working on the others.

There will be other basic products of those kinds concerning which little information has been generally known about the water requirements. That amounts to a very large amount, particularly those who are concerned about completing them.

Classification of Lands

Mr. Fenton. We will take up now classification of land. The appropriation for 1953 was $360,000. The request for 1954 is $410,000, or an increase of $50,000. We will include at this point in the record two tables: (1) Mineral and water technical reports, classification of lands activities; and (2) classification of land, summary of available funds, employees, workload, and pertinent legislation:

(The tables referred to follow:)

Mineral and water technical reports, classification of lands activity

Fiscal year	Appropriations for classification of public lands	Number of technical reports rendered	Reports requested
1942	$105,000	7,422	7,838
1943	105,115	8,022	9,094
1944	225,000	11,028	12,455
1945	240,000	13,197	14,702
1946	214,200	11,384	16,099
1947	275,000	14,276	21,915
1948	245,000	28,004	29,267
1949	300,000	26,872	27,399
1950	325,600	18,622	19,235
1951	328,000	43,521	43,889
1952	360,000	91,166	93,146
1953	360,000	[1] 93,000	[1] 96,000
1954	[1] 465,000	[1] 102,000	[1] 104,000

[1] Estimate.

Classification of lands—Summary of available funds, employees, workload, pertinent legislation

	Fiscal years												
	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954
Available funds	$105,000	$105,115	$225,000	$240,000	$214,200	$275,000	$245,000	$300,000	$325,600	$328,000	$360,000	$360,000	$410,000
Total number of employees	29.4	27.7	39	43	43	48	42	50	49	49	52	52	67
Workloads: [1] Classification cases acted on	7,422	8,022	11,028	13,197	11,384	14,276	28,004	26,872	18,622	43,521	91,166	[2] 93,000	[2] 102,000

[1] Does not reflect number of geologic and river maps published, nor special field reports, work on defining known geologic structures, etc.
[2] Estimate.

Pertinent legislation affecting workload: Executive Order 9087, Mar. 5, 1942; act July 29, 1942 (Congressman Robinson); act Dec. 24, 1942 (Senator O'Mahoney); act Dec. 22, 1943 (Senator O'Mahoney); act Sept. 27, 1944 (Senator O'Mahoney); Executive Order 9701, Mar. 4, 1946; departmental order No. 2188 (Apr. 19, 1946); Reorganization Plan No. 3, May 16, 1946; Executive Order 9632, Sept. 28, 1945; act July 13, 1946, royalty oil (Senator O'Mahoney); act Aug. 8, 1946 (Senator O'Mahoney); act Aug. 7, 1947 (Congressman Barrett) acquired lands; act June 3, 1948, phosphate.

APPLICATIONS RECEIVED

Mr. FENTON. How many applications for classification are you receiving in a year, and how many are you processing?

Dr. WRATHER. There are several items covered in that, Dr. Fenton, which are handled by the Conservation Division, and Mr. Duncan, Chief of that Division, will respond to your inquiries.

Mr. DUNCAN. The tables that you referred to are a summary of each one of those.

In fiscal year 1952, we received requests for 93,146 classification actions, out of which that year we completed 91,166. Compared to that we only handled in 1951, 43,500; in 1945, it was 13,000.

Mr. FENTON. That is on mineral classifications?

Mr. DUNCAN. Mineral, power, or any type of classification that would involve the public lands required by legislation.

Dr. WRATHER. There has been a tremendous increase in the activities on public lands, which have grown at a greater rate, so far as the amount of service we can render on the basis of the present group of people we have, than the increased personnel we have had. I think Mr. Duncan will agree with me on that.

Mr. DUNCAN. That is correct.

Mr. FENTON. Suppose you explain the map you have in front of the committee.

Mr. DUNCAN. This map you are looking at represents the work of the Conservation Division. It shows 79,207 oil, gas, and mineral leases, and requires classification of land in each one indicated here, other than Indian land, which is represented by only about 6,000. They must be classified by the Survey as to whether the area is competitive or noncompetitive. Frankly, there are many areas in which this is not difficult, but they must be processed.

As I said, last year we received 93,000 separate requests because of activities of leasing on the public land, and the acquired land. The acquired land began with the 1947 act, and includes the lands that were purchased by the Government.

On acquired land all minerals can be leased, and are not subject to mining location. The figures on the map do not involve any lands that have been leased in the military reservations.

The figures on the map represent the number of leases [indicating] in each State, the number of acres under lease, and the royalty income for the last fiscal year, 1952. You can see the income just from royalty alone was $38,386,300.

There were 79,207 leases. That is quite a job in itself to keep track of, in addition to all of the accounting, all of the supervision, and all of the classification as to competitive and noncompetitive leasing. We work very closely, of course, with the Bureau of Land Management on all of these problems. This income figure does not include income from rentals or bonus payments, that is, leases sold through competition. For instance, this figure down here in Louisiana on income does not reflect a $6½ million bonus when we leased about 2,000 acres in the Barksdale, La., airfield. The rental and bonus income is a considerable amount.

AMOUNT AND DISPOSITION OF REVENUES

Mr. FENTON. Your annual collection is $38,386,300; is that correct?

Mr. DUNCAN. I would like to correct this statement on the map on total income, where the word "annual" is used. It actually shows the income from royalties on Indian and public lands for the single fiscal year 1952. For instance the income in 1940 was $8,300,000.

Mr. FENTON. And that is turned into the Treasury?

Mr. DUNCAN. All that money is paid into the Treasury; 37.5 percent of the income from each State goes back to the State for the schools and roads; 52.5 percent goes to the reclamation general fund; and 10 percent goes into the Treasury.

Mr. FENTON. Ten percent of that goes to the Treasury.

Mr. DUNCAN. That is right except for the acquired land income. The income goes to the States, and is distributed according to the Federal law under which the land was purchased.

TIME REQUIRED FOR PROCESSING APPLICATIONS

Mr. BUDGE. How current is your program? That is, when the Bureau of Land Management gets an application for a lease, how soon are you able to get personnel out to take care of it?

Mr. DUNCAN. Do you mean for the classification?

Mr. BUDGE. Yes.

Mr. DUNCAN. Undoubtedly you refer to the phosphate activities in Idaho.

Mr. BUDGE. No.

Mr. DUNCAN. We have no office closer than Salt Lake City to these phosphate activities.

Mr. BUDGE. I am referring to the agency. Do you not make an examination of all types of minerals on the public lands?

Mr. DUNCAN. For all leasable minerals, phosphate, coal——

Mr. BUDGE. Oil.

Mr. DUNCAN. Oil and gas, potash, sulfur, and sodium.

Mr. BUDGE. I am just wondering how current you are in your processing; how rapidly can your field service process these applications?

Mr. DUNCAN. If we have available the information, it is only a matter of a few days on oil and gas leases. The oil and gas leases are handled usually within 3 days from the receipt in the office. But a year ago we were embarrassed by the lack of geological information on phosphate deposits, because the Geological Survey in its geological work has not had sufficient funds to obtain all the information necessary for classification work.

TOPOGRAPHIC SURVEYS AND MAPPING

PRIORITY CHANGES IN DEFENSE MAPPING

Mr. BUDGE. Mr. Chairman, I notice the justification for this agency for the fiscal year 1953 was substantially raised, with regard to the mapping item, by reason of the request from the Department of Defense for urgent mapping on the Pacific coast.

Mr. FENTON. Yes.

Mr. BUDGE. Now, a year later they come in and we find the program did not seem to have been so urgent, apparently, from the justification. It has almost been abandoned, and instead they are now over on the east coast, with another large raise attributable to that.

Dr. Wrather, would you care to comment on that?

Dr. WRATHER. That is a shifting of priorities, and it is more apparent than real. In other words, the need for engineering methods on a scale of 1 to 24,000 is not as great as it was, or appeared to be previously.

Apparently they are willing to go along on the smaller scale map, and came to the conclusion that they needed the larger scale map on the east coast, to meet their needs.

In other words, the large-scale map, on an engineering scale, was required in the East; and, as you will note in the justification, there is a shift in emphasis.

Mr. BUDGE. Yes.

Dr. WRATHER. That change is understandable, and there was an agreement that the smaller scale map on the West would satisfy them.

Mr. BUDGE. Of course, that type of map you are referring to would solve the problem we have just been discussing, relative to classification?

Mr. DUNCAN. That would only serve as partial assistance until the geological map could be completed.

Dr. WRATHER. In order to prepare a satisfactory geologic basis of information, they must have a topographical basis. If you are going to do a geological map job in an area, you must have a map on which is superimposed the geologic information. So, we try in mapping our program to meet the needs of the Geologic Division's program, by increasing the mapping program for that particular purpose. That is one of the high-priority items in the mapping program.

SUPERVISION OF MINING AND OIL, AND GAS LEASES

Mr. FENTON. We will take up "supervision, mining, and oil and gas leases." You are asking $1,200,000 for the fiscal year 1954, or an increase of $120,000 over the 1953 appropriation of $1,080,000. We will insert into the record at this point two tables, one showing mineral-leasing activities, workload trends, and unit costs, and the other showing production and royalty values on leases, and so forth.

(The tables referred to are as follows:)

Mineral-leasing activity, workload trends, and unit costs

Fiscal years	1946	1947	1948	1949	1950
(*a*) Available funds [3]	$589,700	$670,000	$673,000	$757,000	$774,500
(*b*) Workload "units" based on aggregate number of mines, wells, and leased properties under supervision	25,869	29,417	33,357	38,016	50,688
(*c*) Number of employees	144	165	140	158	152
(*d*) Average workload per employee (*b*÷*c*)	179	178	238	240	334
(*e*) Average cost per employee (*a*÷*c*)	4,095	4,061	4,807	5,047	5,090
(*f*) Average cost per unit workload (*a*÷*b*)	23	23	20	20	15
(*g*) Royalty accruals	15,096,000	23,102,000	34,044,000	30,650,000	33,122,000
(*h*) Average royalty per employee (*g*÷*c*)	105,000	140,000	243,000	194,000	217,900
(*i*) Average royalty per employee dollar (*g*÷*e*)	3,690	4,970	6,730	5,750	6,510
(*j*) Average royalty per unit workload (*g*÷*b*)	583	784	1,020	806	653
(*k*) Gross value minerals	178,000,000	252,000,000	367,000,000	331,000,000	360,000,000

Fiscal years	1951	1952 [1]	1953 [2] [1]	1954 [2]
(*a*) Available funds [3]	$880,000	$980,111	$1,130,500	$1,234,000
(*b*) Workload "units" based on aggregate number of mines, wells, and leased properties under supervision	61,800	88,416	105,000	125,000
(*c*) Number of employees	160	165	196	222
(*d*) Average workload per employee (*b*÷*c*)	386	536	535	563
(*e*) Average cost per employee (*a*÷*c*)	5,500	5,940	5,768	5,559
(*f*) Average cost per unit workload (*a*÷*b*)	14	11	11	10
(*g*) Royalty accruals	36,871,000	[2] 40,000,000	44,000,000	48,000,000
(*h*) Average royalty per employee (*g*÷*c*)	230,400	242,000	224,000	216,000
(*i*) Average royalty per employee dollar (*g*÷*e*)	6,450	6,735	7,630	8,635
(*j*) Average royalty per unit workload (*g*÷*b*)	597	452	419	384
(*k*) Gross value minerals	392,000,000	[2] 435,000,000	475,000,000	525,000,000

[1] Includes reimbursement from California submerged-lands escrow funds.
[2] Estimate.
[3] Includes funds transferred from Navy.

U. S. Geological Survey, Conservation Division—Mines, wells, production, production value, royalty value on leases, licenses, and permits Federal and Indian lands, fiscal year 1952

State	Number leases, licenses, permits	Total acreage	Number mines	Number wells	Production		Total production value	Total royalty value
					Tonnage	Barrels		
Alabama	34	3,146.66	2		18,172.80		$877,024.71	$3,054.85
Alaska	198	277,679.93	8		538,960.69		4,104,307.69	54,650.46
Arizona	1,405	624,767.23	31		189,070.11		3,037,939.69	284,412.09
Arkansas	62	34,087.63	2				649.60	20.39
California	5,875	2,287,710.81	5	3,095	811,543.30	27,432,789	89,947,598.66	9,177,127.58
Colorado	5,120	4,861,306.91	99	379	690,939.46	12,920,831	37,398,997.88	4,842,720.50
Florida	63	39,713.66	1		3,604.00		10,812.00	540.60
Georgia	5	623.00	3		6,986.05		35,127.54	2,257.75
Idaho	477	501,296.57	5		470,559.03		612,962.95	59,553.51
Illinois	8	1,484.20	2		10,644.97	11,620	836,504.59	21,433.48
Indiana	12	6,408.45				1,139	3,132.25	390.32
Kansas	137	50,156.33		91		2,258	805,438.36	100,700.23
Kentucky	2	150.00				996	2,430.24	302.43
Louisiana	178	75,935.42	1	104	11,597.45	2,913,837	7,505,319.15	930,776.28
Maine	2	7.00						
Maryland	4	587.96						
Michigan	103	69,179.03				37,286	88,518.67	14,364.03
Minnesota	13	2,165.00	10		244,396.00		122,198.00	1,428.00
Mississippi	806	555,624.13	1	3	4,832.00	15,639	45,840.98	5,653.63
Missouri	10	43,738.00						
Montana	6,494	5,828,359.33	60	1,059	746,814.27	2,845,536	9,284,946.84	1,076,742.55
Nebraska	326	173,227.14		3				
Nevada	6,307	4,038,662.75	2		32,610.26		37,282.24	3,728.23
New Hampshire	1	14.00						
New Mexico	10,533	10,521,670.37	54	2,992	5,308,254.71	12,681,411	68,722,310.73	5,148,464.74
New York	3	3,217.00						
North Carolina	26	6,501.00	5		1,019.32		5,432.15	427.46
North Dakota	894	506,307.19	34	21	640,049.09		1,582,956.90	62,846.96
Ohio	16	5,253.51	2		54,843.00	46,198	364,800.25	31,206.68
Oklahoma	6,829	740,659.58	101	3,565	426,885.29	10,145,227	37,193,757.14	3,738,448.31
Oregon	151	127,038.10	1		47.00		235.00	11.75
South Dakota	1,002	806,919.93						
Tennessee	8	2,127.00						
Texas	69	30,862.37		38		170,695	442,593.35	47,128.36
Utah	7,442	8,261,286.58	42	59	3,236,171.17	803,989	18,877,106.16	665,034.65
Virginia	10	7,925.54	1		140,439.57		355,569.43	7,022.00
Washington	122	15,406.22	8		149,711.01		183,264.00	7,553.60
West Virginia	36	50,609.15						
Wisconsin							7,500.00	100.00
Wyoming			1		15,000.00		123,313,163.82	12,098,197.77
	24,424	17,067,689.18	48	3,781	1,954,248.06	44,668,719		
Total	79,207	57,629,503.86	529	15,190	15,707,398.61	114,674,930	405,003,720.87	38,386,299.19

Mr. FENTON. What is involved in supervising mining leases, and oil and gas leases?

Mr. DUNCAN. The mining leases involve the establishment of plans whereby there will be the least possible waste in the recovery of coal or the minerals involved.

One specific example could be given of the situation in Idaho for phosphate, where they have a phosphatic shale on top of a minable deposit of such quality that it could not be used in the acid plant at Pocatello. The supervisor without any known method for treating, required that the shale be stockpiled on the lease.

We now have three firms with electric furnaces, and they are making use of that shale for high-grade phosphate.

That is just one specific example of how practical mining can save natural resources. The potash industry is supervised as to mining techniques and refining techniques. These are subjects of study as to the best possible use of natural resources. The same thing is true out in California, in Searles Lake, to obtain the best use of the brine product without waste, and requires continual supervision. Our field men supervise the mines and the oil and gas leases.

All notices to do work are all filed with the supervisors, and operations are inspected from time to time; the value of the product is determined, and based on this information we believe that we have been able to obtain a good price in the field for computing royalty.

And in Wyoming, because of the amount of sulfur in the gas produced in the Worland field, cooperation by all parties made available some 33 million feet of sour gas per day for commercial consumption and transmittal into Montana and even over into North Dakota, by extraction of the valuable sulfur, and the liquid product.

Mr. FENTON. In your mining operations you administer the operations of the safety regulations?

Mr. DUNCAN. Now, the Bureau of Mines, of course, has been charged with health and safety, but health and safety, regardless of where it is, is a minute-to-minute and a day-to-day proposition. What we are looking for here is practical mining. I mean the best engineering methods of mining, to avoid waste, and to secure the highest production. We have several properties of high coal in the west. We have not been able to develop a method of recovery for as much of the coal as we feel should be recovered. That is still under study by the Survey and the Bureau of Mines; it is a continuing operation, a day-to-day supervisory requirement to determine what is due the United States, and to determine how to produce without waste. And I can assure you that it pays dividends and income in royalties to the United States.

Mr. FENTON. I can see that all right.

Mr. DUNCAN. On December 31, 1949, we only had 30,000 leases. We now have under supervision, as of December 31, 1952, leases on 79,000 different properties. That involves quite a lot of bookkeeping.

Mr. FENTON. That is right.

NEW OFFICES

Will you further justify the need for two new offices, is that because of the increase in workload?

Mr. DUNCAN. It is a question of having personnel available where the operation is being carried on, close to the discovery in the area.

We have no one closer than Salt Lake City, Utah, or Casper, Wyo., to supervise operations or for the operator to contact in southwestern Wyoming, and that is about 200 miles away from the nearest office.

The Lander, Wyo., office is in the Indian area, an area where supervisory activities are required constantly. We do not intend for those offices to have more than two engineers and one clerk. The accounting would be done at the headquarters office.

Mr. FENTON. Any questions on that item?

Mr. BUDGE. No questions.

GENERAL ADMINISTRATION

Mr. FENTON. We come to the last item, general administration: The appropriation for 1953 was $575,400, and you are requesting for 1954, $700,000, or an increase of $124,600.

We will place in the record at this point page 43 of the justification.

(The material referred to follows:)

Funds available or estimated for work of the Geological Survey

	1953	1954
Direct appropriation plus State cooperative funds	[1] $31,069,185	[2] $36,630,000
Advances from other Federal agencies, plus miscellaneous reimbursements	19,930,727	19,690,800
Total anticipated funds	50,999,912	56,320,800
General administration:		
Financed by direct appropriation	[3] 575,400	[4] 700,000
Charged to funds advanced by other Federal agencies	496,600	400,000
Total general administration	1,072,000	1,100,000

[1] 61 percent of total funds
[2] 65 percent of total funds.
[3] 54 percent of total administration.
[4] 64 percent of total administration.

The estimate is distributed as follows:

Item	Base 1954	Estimate 1954	Increases
Director's office	$165,000	$170,000	$5,000
Office of the executive officer	36,000	36,000	
Budget office	26,000	26,000	
Personnel Branch	174,000	180,000	6,000
Accounts Branch	298,000	305,000	7,000
Service and Supply Branch (Washington and Alaska)	174,000	180,000	6,000
Rocky Mountain Service and Supply Branch	99,000	100,000	1,000
Publications Service offices	40,000	40,000	
Miscellaneous costs (telephone and health services for the above units, general printing for the entire Bureau, charges for services rendered by the Department, etc.)	60,000	63,000	3,000
Total general administration	1,072,000	1,100,000	28,000
Less amount to be charged to transferred funds	496,600	400,000	−96,600
Amount to be charged to direct appropriation	[1] 575,400	[2] 700,000	124,600

[1] 54 percent.
[2] 64 percent.

SIZE OF APPROPRIATIONS

Mr. FENTON. What is the principal reason for the large and steady increase in the appropriations of some $5,615,295 in 1944 to $25,362,685 in 1953?

Dr. WRATHER. The increase, I think, primarily, is indicated in that chart that I gave you this morning, and the graph, which

shows the increase in topographic mapping required since the military emergency arose.

We have been obligated to expand this mapping a great deal. The same is true of strategic and critical mineral studies and geological surveys.

The same is true of water resources studies, in which many activities that are an integral part of the mobilization program were affected by all of these programs under which we have had a large increase in the percentage of work that we have had to do over previous years.

Topographic Surveys and Mapping

PROGRAM CHANGES IN MAPPING FOR DEFENSE DEPARTMENT

Mr. Budge. Dr. Wrather, I was interested in hearing a moment ago your last increase for the previous fiscal year, particularly as regards the military request for mapping on the Pacific coast.

Now, apparently during the fiscal year they have decided that that is not necessary.

Dr. Wrather. The mapping was not all on the Pacific coast; it was for the whole military area, requiring us to map a larger area, as indicated on the wall chart.

The shifting of some of the mapping from the west toward the east was a question of military priority and a shifting of emphasis.

Mr. Budge. In your justification for the present fiscal year you state:

> The overall increase in this activity and the special increase in the Pacific region are due to increased military demands for mapping around Federal areas on the west coast.

That was your justification.

Dr. Wrather. That is true.

Mr. Budge. That is, for a big portion of the increased activities for this present fiscal year?

Dr. Wrather. I am sorry that Mr. FitzGerald is not here, because he could give you a more specific answer to that question, because he is constantly in contact with the military and keeps up with the whole priority program.

At the moment I am unable to give you a specific answer, including a breakdown, but I will be glad to get it up if you would like to have it.

Mr. Budge. It would appear from the two justifications, the justifications on which you built your increase for the fiscal year 1953 has disappeared, and now you have the justification only for engineering maps on the east coast.

Dr. Wrather. I do not think that is quite correct. I think it is a change in emphasis, as I pointed out a while ago. In other words, there is still a demand on the west coast, but for a smaller scale map than was originally contemplated, but the emphasis has shifted from the west coast to the east coast for a large scale map.

Mr. Budge. Reading from page 5 of your justification, for the fiscal year 1954, you state:

> Part of the changes involved shifts of area requirements from the west coast, where general purpose mapping is more apt to be sufficient, to the eastern coast, where an engineering map is more generally required.

Dr. WRATHER. That is correct. That is what I referred to a while ago, as representing more a shift in emphasis by the Topographic Division for the military.

Mr. BUDGE. Mr. Chairman, I think it would be helpful if the doctor would include for the record a statement as a breakdown, based on this statement:

This increase is the direct result of substantial changes in the military requirements that were presented to the survey after the 1953 budgets were submitted.

Dr. WRATHER. Yes.

Mr. BUDGE. From your two justifications, at the present time, it would appear to me that the justification on which you based the large increase for 1953 was not actually carried out, and that you have now apparently engaged upon a new program at the request of the military.

Dr. WRATHER. As I understand, it does not substantially change the amount of money involved. It changed the character of the work, which was being done in the several areas, but the amount of money being expended is no larger, as I understand, on the east coast. It is merely a shift in priority without materially affecting the amount of money involved.

Mr. BUDGE. Which all adds up to the fact that the military did not know what they wanted?

Dr. WRATHER. It would be very hard for me to answer for them. In other words, we have undertaken to do this work based on their requirements, and to keep the mapping in an orderly state, to be sure that when the military mapping is done, we also have a map that can be of use to the civilians, and to get the greatest amount of good, public good, out of the public funds expended.

That is why we have indicated these sums of money as a part of the military requirements in this program, on which we are not, I think, spending any more; there will be no substantial change.

Mr. BUDGE. I appreciate, of course, that the decision was not yours to make.

Dr. WRATHER. No. We will be glad to get any additional information for the record you would like to have furnished to you. I would like to be sure that Mr. Stearns understands in a little bit more detail just what you would like to have.

Mr. BUDGE. I would like to have something—perhaps you would not be able to put it in—but I would like to know why your 1953 justification is based upon the Pacific coast mapping, and then the need for that apparently vanished under the whims of the military, and now you are on a new program, so that the justification for the 1953 increase disappeared.

Mr. WRATHER. I am sorry I am not in position to give you more detailed information, but we can get it for you, but the substance of it is there was a shift in the priorities. We cannot give you the details now, but we will be glad to get them for you and submit them for the record.

Mr. BUDGE. Thank you.

(The information requested follows:)

At the time the justification for the 1953 budget was presented, the requirements for the topographic mapping needed in connection with overall defense plans had been indicated to the Geological Survey by the Department of Defense. It involved large areas on the Atlantic and Pacific coasts and around the Great Lakes. Work was planned in those areas as indicated in the justification for

1953 appropriations. In January 1952, and at various times since that date the mapping required for military defense has been developed in greater detail—by the addition of some areas, but largely by the identification of critical zones within the broad areas just outlined and assigning top priority to these smaller zones. Because of the industrial concentrations in eastern United States, and for other reasons, a preponderance of the highest priority work developed in the eastern part of the country. This called for a shift in emphasis for mapping operations. There was no reduction in the mapping required in the Pacific region and present plans for the next few years include substantially the same total mapping as that which was contemplated in 1953. The actual shift in the emphasis on mapping is indicated by the estimates of $800,000 and $2,400,000 for engineering and general-purpose mapping in the Pacific region for 1953 (see pp. GS 5–6, Interior Department justifications for 1953) as compared to $1,380,000 and $1,525,000 reported for 1953 (see pp. GS 5 and 6, Interior Department justifications for 1954). Combining these two categories, the total of $2,905,000 reported for 1953, as compared with the total of $3,200,000 estimated for 1953, indicates that the decrease in mapping activity in the Pacific region was not great. It was, in fact, in about the same ratio as the decrease in appropriations for 1953 as compared with the estimates for that year. There was, however, an appreciable shift in emphasis between the types of mapping.

Supervision of Mining and Oil and Gas Leases

TERMINATING LEASES

Mr. Fenton. In some areas, mineral and mining leases have precluded other uses of the public domain, when no actual mining or prospecting is going on. Have you been having some problem in getting these leases terminated?

Mr. Duncan. I believe, Mr. Chairman, that refers to the placer and mining locations in the forest areas, and in the West, say, for example, the land over which there would be no control, unless the Department obtains legislation, requiring the filing of all claims in the Department, and for use of such surface as they need.

I doubt if that refers to very many mining or oil and gas leases on Federal land. There are many mines that are shut down, particularly in coal areas, because the market for the product is not there. In other words, there are very few that are not underground mines, which would not disturb the surface, except right around the location.

Mr. Fenton. Most leases are being used?

Mr. Duncan. Once they have started development there is continued development, such as oil and gas and mineral leases, except as to coal, where the activities for coal, particularly in some areas, usually run for maybe 2 or 3 months in the year, for lack of a market. There is a market condition in the West, in the coal area, which is pretty bad right now.

So that I believe that the questions refer to mining locations on the public land for minerals other than subject to permit or lease on the Federal public domain.

Number of Employees

Mr. Fenton. How many employees do you have in the Geological Survey?

Mr. Stearns. In 1953 our estimate for permanent employees, financed from all funds, is 7,147, which is being increased in 1954 to 7,757—that is an increase of 610—financed from all funds. Approximately 50 percent of available funds are transferred from other Federal agencies and State cooperative funds.

On December 31, Mr. Chairman, we actually had on the payroll, 7,620 employees. That includes temporary employees.

Mr. FENTON. Then you will have employed 2,300 additional people over your regular establishment?

Mr. STEARNS. No. The 7,620 includes 1,054 part-time and seasonal employees.

Mr. FENTON. I see.

Dr. WRATHER. We have seasonal employees, Dr. Fenton; chainmen, rodmen, and helpers, in the field parties, who are employed from season to season, where there is approximately a 100 percent turnover from one season to the other. Then we have this category of permanent employees, and other people that are on the payroll, that we figure as permanent. Six thousand five hundred and sixty-six permanent employees were on the roll as of December 31.

Mr. FENTON. Your estimate here is for 5,375.

Mr. STEARNS. That is average employment on programs financed by this appropriation, including reimbursements. The figure of 6,566 represents permanent employees on the roll, financed from State cooperative funds, and funds which we receive from other Federal agencies, as well as from our direct appropriation.

Mr. FENTON. I see. For these additional requests do you have to supply the men on a temporary basis?

Dr. WRATHER. It depends largely on the character of the job. Some of these jobs we can handle with the personnel that we have in the ranks. Some of the jobs require that we hire additional personnel. It largely depends upon the particular program that is thrown upon us, whether we can handle it with our existing personnel, or whether we have to add additional personnel from the outside.

On this defense military program we had certain people within the Survey that we could put on the work, but they were tied up in other equally important jobs. We simply could not quickly take them off that work and put them on this work, so it became necessary for us to get other employees. We had some in the organization, and others we got from the oustide.

If there is an additional job to be done, that inevitably requires additional personnel, so we have to recruit for these different jobs on a somewhat different basis. As I say, it depends upon whether or not we can spare men of our own organization without wrecking the organization's program.

AUTOMOBILES AND TRUCKS

Mr. FENTON. How many automobiles do you have?

Dr. WRATHER. The request, I think, is for 146 passenger automobiles, of which 118 are for replacements, and then I think there are 28 new cars that are required.

Mr. FENTON. I did not quite get the total figure.

Dr. WRATHER. 146 cars requested, of which 118 are for replacements of those that are worn out and have served their usefulness, and are ready to be turned in, according to the regulation set up in Government schedules.

Then I think there are 28 new cars.

Mr. STEARNS. That is right.

Dr. WRATHER. Twenty-eight new cars only are involved in this program. And incidentally that is one item that is used in carrying

on all of these activities in geologic mapping and also supervision work. This supervision work involves personnel, considerable travel.

Then there is an item listed in the justifications which represents the cash value of the turned-in vehicle, and as that is set up in the justification it is almost entirely an automobile figure. In other words, when we turn in these cars, we indicate the total cash value, and that is set out on the sheet as a separate item, in accordance with the general requirements of the General Accounting Office.

Mr. STEARNS. Yes.

Dr. WRATHER. It appears on the record for the first time in the summary sheet in the justification.

Mr. FENTON. Your request is for 146 automobiles.

Dr. WRATHER. Yes.

Mr. FENTON. 118 for replacement?

Dr. WRATHER. 118 for replacement, yes.

Mr. FENTON. And 26 new ones?

Dr. WRATHER. Yes.

Mr. STEARNS. 28 new cars.

Mr. FENTON. Is that the total number of cars the Bureau has?

Dr. WRATHER. No, not the total number.

Mr. FENTON. What is the total number?

Dr. WRATHER. You are asking for the total, instead of the number we are buying?

Mr. FENTON. Yes, I want the total number of cars you have in the Bureau.

Mr. STEARNS. 681 passenger cars are now in our fleet.

Mr. FENTON. And you are asking for an increase?

Mr. STEARNS. Yes.

Dr. WRATHER. That does not include trucks, Dr. Fenton; those are passenger cars. How many trucks do we have?

Mr. STEARNS. We have about 1,997 trucks.

Dr. WRATHER. Those are utility trucks, used in topographic surveys for field parties, for water investigation, and also for geologic work and because we have field organizations, they are mobile units, and they move during a large part of the year. This is survey equipment, which is quite essential in getting the job done that we have to do.

In conservation, for instance, in order to do the job that has been indicated, these men have got to visit the location, supervise inspection, visit the leases, visit the operating mines. This all requires an enormous amount of travel—automobile travel.

The same is true of water-resources investigation, where the stream gages must be visited at regular intervals, not only to read them, but to be sure that the equipment is in shape.

Mr. FENTON. Are you asking for any new trucks.?

Mr. MOWITT. Yes, we are asking for 125 new trucks, mostly for the topographic-mapping program.

Dr. WRATHER. We have recently made an inventory of all our cars, and have taken a look at them to try to get the automobile equipment such as we need, in good repair and in good shape, and to get rid of the automobiles that have become too expensive to repair. In other words, we are trying to have our equipment in the best possible operating condition in order to meet the job we have to do. We have found a lot of things about the operation of automobiles, which we think will prove extremely valuable and money-saving.

Travel Funds

Mr. Budge. I see you have a figure of $1,660,000 for travel, and the estimate for 1954 is $2,035,000.

Mr. Mowitt. More people will be required to travel. With the additional personnel that would be added, additional travel money is required.

Decreases To Arrive at 1954 Base

Mr. Fenton. There is one item I missed here, going through the justifications. The decreases for your topographical surveys and mapping were $45,000, and water resources $5,000, and soil and moisture water resources investigations $40,000, and geographical and mineral resources surveys $5,000, and that was due, as I understand, to the transfer of your building to the General Services Administration.

Dr. Wrather. They assumed certain of these obligations which we carried up to a certain point until we were taken over by the General Services Administration out of our own appropiration. In other words, they are a credit to our account and a charge aganist their account. I believe I am correct.

Mr. Mowitt. I believe that is right. They are taking over the rental of certain buildings and putting it in their appropriation and taking it out of ours, and they assume the rent from that point on.

Mr. Fenton. They are taking it out of your appropriation?

Mr. Mowitt. That is, we deduct it from the amount that we request, and they add it to the amount that they request when they come up for their appropriation. It is just a shift from one pocket to the other. That is what most of those items represent.

Funds for Services Performed by Other Agencies

Mr. Budge. I would like to ask just one question. I note in your obligations by object you list $1,170,000, which is an increase of $60,000 over the current fiscal year, for services performed by other agencies. What does that comprise, and why the increase?

Mr. Stearns. Mr. Budge, I will have to admit that that is an error in the budget. Of the $1,170,000, $603,000 should have been included in 09. It is the $603,000 for equipment in the capital outlay item that we have been talking about for space utilization. The entire item for the space utilization program was inadvertently shown in 1954 the same as in 1952 and 1953 in services performed by other agencies. That was the correct showing in 1952 and 1953, but it is incorrect in 1954.

Mr. Budge. Now, exclusive of that item, of what is the rest of it made up?

Mr. Stearns. The rest of it is primarily for mapping services, I believe, performed for the Topographic Division by the Tennessee Valley Authority.

Dr. Wrather. I am not too familiar with that budgetary breakdown, and I cannot speak to that.

Mr. Stearns. That is primarily for topographic mapping performed by the Tennessee Valley Authority.

Mr. Budge. Doctor, in your budget you have a great many items that you are justifying, in effect, for other agencies. You have an item where you are paying out money to other agencies, and it seems

to me that you should be able to tell us what services you are buying from other agencies.

Dr. WRATHER. Well, there is a mapping unit in TVA that was very largely staffed by the Geological Survey in the early staffing period, and for a time they financed their own mapping organizations. Now they have reached a point in which the mapping activity has declined, and they found themselves with capacity for doing a lot of things which we had to do, and on occasions we have made arrangements with them to repay them for doing a certain phase of mapping, which is done according to our own standards. In fact, the plan was pretty well organized and established by the Geological Survey. We have had certain portions of topographical processing done by the TVA for which we repay them the actual cost of the item.

Mr. BUDGE. Would you be kind enough to furnish for the record a statement of that 07 item?

Dr. WRATHER. Yes, sir.

Mr. Fenton. Give us a complete breakdown of that.

(The matter referred to follows:)

Estimate for services to be performed by other agencies, fiscal year 1954

Denver building alterations postponed to 1954	$297,000
Topographic mapping operations performed by Tennessee Valley Authority	270,000
Total	567,000

Annual transfers of funds are made to the Maps and Surveys Division of the Tennessee Valley Authority for mapping operations in Tennessee and Kentucky. These operations are a step in the completion of standard quadrangle maps that are a part of the Geological Survey's national program. The use of the facilities of the TVA is an effective means of completing the large cooperative program in Kentucky, which imposes a peak load on the Survey in that area during a relatively short period of time.

TYPOGRAPHIC SURVEY AND MAPPING

PROGRAM CHANGES IN MAPPING FOR DEFENSE DEPARTMENT

Mr. BUDGE. Going back to that other item that I would like for the record, I do not believe I made myself quite clear, Doctor. This is, as I see it, what has happened before this committee and the Congress. For your 1953 appropriation you received a substantial increase to perform a specific service called for by the military. Now, as a matter of fact, as I understand the testimony today, that specific purpose upon which your increased funds were based was not performed by your agency but by another agency within the Defense Department. This committee has a responsibility to look at these increases in the justifications, and when the funds are spent for another purpose, as is obvious in this instance, I think the committee is entitled to know why the money was not spent as it was stated it was going to be spent.

Dr. WRATHER. As I have said, I cannot give you a definite answer on that, but my impression is that it was for mapping but for a changed priority within the type of mapping requested.

Mr. BUDGE. Would you be kind enough to furnish us a statement of that?

Dr. WRATHER. Yes, sir; we will get that information. I hope that I am right, but I am not too sure.

(Statement requested appears on p. 149.)

Mr. BUDGE. What I am getting at is that the committee was told that you needed the money for a specific purpose and you used it for another purpose.

Dr. WRATHER. Colonel FitzGerald could have answered that question if he were here and I am sorry he is not here to speak for it. He has the facts and I do not, but we will get them for you.

EQUIPMENT ESTIMATE

Mr. FENTON. You might give us a breakdown on that 09, too.

(The matter referred to follows:)

Surveys, investigations, and research, Geological Survey—equipment estimate, fiscal year 1954

	Quantity	Cost
Photogrammetric equipment:		
Diapositive printers	24	$150,000
Multiplex units, including bars, projectors, tables, and electrical equipment	40	258,000
Photogoniometer	1	9,500
Twinplex units with accessories	12	180,000
Cartographic equipment:		
Cartographic camera	1	18,000
Drafting equipment		80,000
Projectors	51	45,000
Field survey and hydrologic equipment:		
Alidades	115	43,500
Altimeters	230	32,000
Binoculars	65	15,500
Cranes	50	7,500
Current meters	500	35,500
Gamma ray logging apparatus	1	8,000
Petrographic microscopes	22	31,000
Reels, sounding	150	15,000
Sonic survey exploration equipment		40,000
Water stage recorders	750	237,500
Weights, sounding	50	10,000
Cameras, compasses, stereoscopes, levels, barometers, barographs, deep-well logging reels, gages, stopwatches, resistance thermometers, resistivity apparatus, recording thermographs, and other precision instruments		264,100
Outboard motors, two-way radios, camping equipment, hand tools, portable typewriters, and other equipment necessary to the operation of field parties		120,000
Laboratory equipment:		
Instruments and apparatus		91,000
Furnishings and fixtures		70,000
Office machines and furnishings, primarily for field offices		95,000
Passenger cars:		
New	28	39,200
Replacements	118	118,000
Trucks (half-ton and larger) for transportation of field parties and equipment:		
New	125	187,500
Replacements	316	379,200
Capital outlay:		
Palo Alto Building:		
Laboratory benches, sinks, hoods, etc		135,000
Library shelving and equipment		20,000
Movable partitions		70,000
Special plumbing and electrical installations		25,000
Washington Building:		
Laboratory benches, sinks, hoods, etc		231,000
Offset press, 35 x 45		55,000
Offset press, 42 x 58		67,000
Total		3,183,000

The proposed purchases are (1) to provide normal equipment for the proposed additional personnel; (2) to replace equipment no longer useful due to wear or obsolescence; (3) to add equipment, usually of new design or invention, that will materially increase the productivity of the individual employees; and (4) to provide those items of equipment such as laboratory fixtures and map printing presses, to be installed in the Palo Alto and Washington area buildings while those are under construction. The first two categories consist mostly of surveying and hydrologic instruments and other equipment necessary for field work. The third

category consists largely of electronic and mechanical equipment to be used in geologic investigations, and photogrammetric instruments to be used in topographic mapping. Part of the photogrammetric equipment is to provide for a single-shift operation, past experience having shown double-shift operations to be appreciably less efficient.

FISH AND WILDLIFE SERVICE

THURSDAY, FEBRUARY 26, 1953.

WITNESSES

ALBERT M. DAY, DIRECTOR
DR. CLARENCE COTTAM, ASSISTANT DIRECTOR
JOHN R. GARDNER, CHIEF, BRANCH OF BUDGET AND ADMINISTRATIVE MANAGEMENT

Mr. JENSEN. We are glad to have Mr. Albert M. Day, Director of the Fish and Wildlife Service, before the committee.

Mr. DAY. Thank you, Mr. Chairman. First, we have a moving picture which we would like to show to the committee, describing the sea-lamprey program which is now being conducted on the Great Lakes. It will only take about 10 minutes to show the picture.

Mr. JENSEN. We will be happy to see it.

(Thereupon, the moving picture was shown to the committee.)

Mr. JENSEN. Mr. Day, I presume you have a general statement to make to the committee before we start asking questions.

Mr. DAY. Yes, Mr. Chairman. I have a brief statement which I would like to present.

GENERAL STATEMENT

Mr. Chairman and members of the committee, it is always a real pleasure to meet with this committee to report on the administration of the Nation's fish and wildlife resources, and to outline the needs of the Service for the coming fiscal year. I should at the outset state my appreciation for the understanding and sympathetic attitude that you have always shown toward the problems of the Fish and Wildlife Service. Many of you have visited Alaska and other sections of the country where the fish and wildlife problems are ever present, and have gained thereby a first-hand knowledge of the many requirements for the satisfactory administration of this important natural resource.

I suspect that you must become a bit weary as you listen to the parade of witnesses present arguments for more and more funds to carry out the varied programs of the Interior Department. Yet, insofar as I am concerned, I feel that I must, in all honesty, tell you of our needs if we are to efficiently carry out responsibilities placed upon us by the Congress—responsibilities which represent activities desired by the millions of our citizens who either make their living from, or who enjoy participation in, the fish and wildlife resources of the Nation.

I am sure that the Bureau of the Budget, when attempting to fit the requirements of the Fish and Wildlife Service into the overall pattern of Government, went as far as they felt they could within the President's budget policy. Yet, I found this year, when we sat down to

work on estimates, that fitting the actual needs of the Service for 1954 into the budget limitations prescribed was just about the most difficult and discouraging experience of any since I have been Director. This occurred in spite of the most liberal treatment, and I may say enthusiastic support, of the Members of the Congress last year that has been experienced in the history of the Fish and Wildlife Service. The chief criticism that we have received from the Congress has come from the members of this committee, and these criticisms have been directed at us because we have not presented large enough requests for funds to meet the demands of the constituency which we represent. This committee, for the past 3 years, has appropriated every dollar recommended in the President's annual budget, and has then added substantial sums above the budget figure to undertake special programs. As I said a moment ago, some of you members have spoken rather strongly about our failure to bring you more realistic estimates, but, of course, we must confine our submissions to those figures that are felt by higher authority to fit into the President's annual budget policy.

FISH HATCHERIES

There has been a great deal accomplished in recent years to bring the legislative base for the Fish and Wildlife Service into proper form. Most of the new laws have contemplated the expenditure of additional funds, thereby making the annual budget process more difficult. As an example, this committee, as well as the Bureau of the Budget, requested the Service in 1950 to present a long-range construction and rehabilitation program for the Service's 92 fish hatcheries scattered throughout the Nation. This was done. Some funds have been provided each year and a number of hatcheries have been developed and improved, while work on others is now underway. We still have a long way to go to bring this single program of the Service to maximum efficiency, yet we are finding already that the expansion of the hatchery program is now hampering and will continue to cripple all other activities so long as we operate under present ceiling limitations. Our estimates for the annual definite appropriations total $13,285,000, an increase of only $88,179 over 1953. The increase over the base for 1954 (1953 appropriation less nonrecurring items) totals $1,133,979, of which we have been forced to allocate $530,000, or approximately 47½ percent, to finance the expanded hatchery program, leaving little to spread among the many other Service activities which also must face the rising costs of operation. Also, other activities authorized by laws enacted last year must be financed. So, the increases recommended by the Bureau of the Budget are more apparent than real.

OPERATIONS IN ALASKA

I should like here to express my sincere appreciation for the action taken by this committee last year in making 25 percent of the receipts obtained from the sale of the fur sealskins from the Pribilof Islands available for operations on the mainland of Alaska. Fish and wildlife problems of Alaska have been growing steadily worse since the war, and particularly since the influx of so many military personnel and civilian construction workers into the Territory. We were in a most desperate plight a year ago when this committee recognized the situa-

tion and made 25 percent of the receipts available, which gave us an additional amount of some $831,000. With that money, we have been rehabilitating our fleets of vessels and airplanes; have installed excellent war surplus radio communication facilities on our vessels and planes and in shore stations, which has greatly increased efficiency of operations; have increased the staff of enforcement officers and stream guards; and have constructed and staffed new headquarters at remote spots for more adequate patrol of the big game and fur resources. In short, we have been able to come much closer to meeting our responsibilities in the Territory. That action of this committee last year did more to improve the Service's administration of the highly important fish and wildlife resources of the Territory than any other single move taken within my personal experience. As a result of increased patrol and enforcement and reorganization of our research activities, I am confident that the salmon runs can be restored within a reasonable time in spite of the ever-increasing fishing pressure that we are now experiencing.

OTHER INCREASES REQUESTED

These estimates include $75,000 to initiate administration of a law passed by the last Congress to check the interstate transportation of illegally taken commercial species of fish. They also include small increases for the conduct of river basin studies, which are sorely needed in the Rogue River Basin of Oregon and in the New England and New York areas. We have also included a small sum to initiate drainage surveys. Many valuable waterfowl breeding marshes are disappearing throughout the prairie States because of the accelerated pace of agricultural drainage, a large portion of which is stimulated by Government payments under the Department of Agriculture's soil conservation and production and marketing programs. We know that this drainage is rapidly decreasing the wildlife areas available for breeding waterfowl, and that these must be replaced or other areas substituted if the waterfowl resource is to be preserved in years to come; yet, we have inadequate resources with which to carry on basic studies to obtain a well-rounded picture of the actual losses occurring in the breeding areas.

Other increases which we have requested in this budget of which I should like to make special mention are $115,000, principally for equipment replacement in connection with our mammal and bird reservations program, and $26,625 for the very important soil and moisture conservation program, together with a very nominal increase for regional office expenses. The appropriations requested for investigations of resources and for construction are materially less than the amounts appropriated for these purposes in the fiscal year 1953.

MANAGEMENT OF RESOURCES

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$6,943,196	$7,325,375	$7,875,000
Transferred to "Salaries and expenses, defense production activities, Interior," pursuant to Public Law No. 253	−8,400		
Adjusted appropriation or estimate	6,934,796	7,325,375	7,875,000
Reimbursements from non-Federal sources	33,586	22,000	42,000
Reimbursements from other accounts	57,392	60,000	
Total available for obligation	7,025,774	7,407,375	7,917,000
Unobligated balance, estimated savings	−54,632		
Obligations incurred	6,971,142	7,407,375	7,917,000
Comparative transfer from "Salaries and expenses, Fish and Wildlife Service"	758	42	
Total obligations	6,971,900	7,407,417	7,917,000

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
1. Administration of fish and game laws	$1,571,499	$1,727,876	$1,727,876
2. Propagation and distribution of food fishes	2,173,549	2,427,058	2,757,058
3. Mammal and bird reservations	1,850,812	1,843,914	1,958,872
4. River basin studies	256,585	279,250	342,250
5. Control of predatory animals and injurious rodents	931,642	949,236	964,236
6. Soil and moisture conservation	96,835	98,083	124,708
Total obligations from appropriated funds	6,880,922	7,325,417	7,875,000
Reimbursements from non-Federal sources:			
7. Replacement of personal property sold	33,586	22,000	42,000
Total direct obligations	6,914,508	7,347,417	7,917,000
Obligations Payable Out of Reimbursements From Other Accounts			
1. Administration of fish and game laws	9,660	9,000	
2. Propagation and distribution of food fishes	1,456	3,000	
3. Mammal and bird reservations	6,649	9,000	
4. River basin studies	33,998	33,000	
5. Control of predatory animals and injurious rodents	5,629	6,000	
Total obligations payable out of reimbursements from other accounts	57,392	60,000	
Total obligations	6,971,900	7,407,417	7,917,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Summary of Personal Services			
Total number of permanent positions	1,047	1,023	1,063
Full-time equivalent of all other positions	205	223	263
Average number of all employees	1,102	1,212	1,287
Average salaries and grades:			
General schedule grades:			
Average salary	$4,533	$4,540	$4,581
Average grade	GS-6.5	GS-6.5	GS-6.4
Crafts, protective, and custodial grades:			
Average salary	$3,286	$3,239	$3,280
Average grade	CPC-4.8	CPC-4.9	CPC-4.8
Personal service obligations:			
Permanent positions	$3,779,254	$4,174,853	$4,332,637
Part-time and temporary positions	615,052	669,540	784,412
Regular pay in excess of 52-week base	14,228	15,778	17,622
Payment above basic rates	135,039	137,502	117,316
Total personal service obligations	4,543,573	4,997,673	5,251,987
Direct Obligations			
Appropriated funds:			
01 Personal services	4,505,248	4,955,703	5,251,987
02 Travel	323,104	360,490	393,219
03 Transportation of things	61,423	70,086	64,109
04 Communication services	50,656	46,171	47,415
05 Rents and utility services	97,043	94,900	100,433
06 Printing and reproduction	26,467	37,876	39,158
07 Other contractual services	275,424	337,591	270,941
08 Supplies and materials	1,052,418	1,043,794	1,171,478
09 Equipment	315,835	211,736	392,304
10 Lands and structures	240,890	256,479	258,714
13 Refunds, awards, and indemnities	412	2,355	2,355
15 Taxes and assessments	11,636	15,543	17,398
Subtotal	6,960,556	7,432,724	8,009,511
Deduct charges for quarters and subsistence	79,634	107,307	134,511
Total obligations from appropriated funds	6,880,922	7,325,417	7,875,000
Reimbursements from non-Federal sources:			
09 Equipment	33,586	22,000	42,000
Total direct obligations	6,914,508	7,347,417	7,917,000
Obligations Payable Out of Reimbursements From Other Accounts			
01 Personal services	38,325	41,970	.....
02 Travel	11,642	11,110	.....
03 Transportation of things	6	10	.....
04 Communication services	41	50	.....
06 Printing and reproduction	600	730	.....
07 Other contractual services	4,054	2,820	.....
08 Supplies and materials	2,724	3,310	.....
Total obligations payable out of reimbursements from other accounts	57,392	60,000	.....
Total obligations	6,971,900	7,407,417	7,917,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$1,024,884	$1,032,131	$1,057,506
Obligations incurred during the year	6,971,142	7,407,375	7,917,000
	7,996,026	8,439,506	8,974,506
Deduct:			
Reimbursable obligations	90,978	82,000	42,000
Unliquidated obligations, end of year	1,032,131	1,057,506	1,132,506
Total expenditures	6,872,917	7,300,000	7,800,000
Expenditures are distributed as follows:			
Out of current authorizations	5,889,738	6,275,000	6,750,000
Out of prior authorizations	983,179	1,025,000	1,050,000

ADMINISTRATION OF FISH AND GAME LAWS

Mr. JENSEN. Under the heading of "Management of resources" Congress appropriated $7,325,375 for 1953. This year you are asking for $549,625 more for that purpose. Will you tell us briefly why you are asking for this increase?

INCREASE FOR ADMINISTRATION OF BLACK BASS ACT

Mr. DAY. The increases consist of $75,000 to carry into effect a law that was passed by the last session of Congress, which would make what we know as the Black Bass Act, effective insofar as all species of fish are concerned, commercial as well as sport.

The Black Bass Act provides that any fish taken illegally in one State cannot be shipped in interstate commerce without violation of the Federal law. That applied to game fish alone.

Mr. JENSEN. Do you still need to police that law?

Mr. DAY. Yes, although it has not been needed so much of late in the black bass field.

Mr. JENSEN. Just what do you mean by "much"? Has there been any?

Mr. DAY. Some.

Mr. JENSEN. What do you mean by "some"?

Mr. DAY. We have two people paid from funds to patrol the shipment of black bass and other species of game fish.

Mr. JENSEN. Do you think they are needed?

Mr. DAY. Yes, they are needed. Some illegal fish come into the city of Washington.

Mr. JENSEN. You are asking for $75,000.

Mr. DAY. This $75,000 is to implement a broadly expanded program. We now are instructed by the Congress to see that all species of fish—including commercial varieties—are not shipped from one State to another in interstate commerce, when taken in violation of State laws.

FUNDS FOR ADMINISTRATION OF ALASKA FISHERIES

Mr. JENSEN. Now, going to your Administration of Alaska fisheries." Last year, as you mentioned, we did permit the Fish and Wildlife Service to use 25 percent of the profits from the Pribilof Island seals for enforcement purposes in the Territory of Alaska. This 25 percent amounts to $831,540 for fiscal year 1953.

You propose to spend $602,500, which leaves a balance of $229,040.

Now, are you going to need that $229,040? What are you going to do with it?

Mr. DAY. We reserved that amount deliberately as a reserve. Instead of spending the entire eight hundred thousand-odd dollars, which we could well have done, so far as need was concerned, we felt it would be better to set aside a reserve of approximately $200,000 to carry us over the operating season of this year in case, as has happened in the past, the appropriation bill is not passed until some time after June 30.

We are planning this year that we will use the entire 25 percent, still keeping in reserve $150,000 or $200,000 for that type of operation during the end of the next fiscal year.

Mr. JENSEN. I am wondering if it is necessary to keep a reserve in this case? We know pretty well that you are going to have a profit on the Pribilof seals each year. I do not think there has been any exception. How much has that been each year?

Mr. DAY. Around $3½ million.

Mr. JENSEN. Over a period of how many years?

Mr. DAY. Oh, that has occurred for the past 10 years, at least, I presume.

Dr. COTTAM. Except that during the war there was some difference.

Mr. DAY. We set aside the reserve, Mr. Chairman, for the first year only.

Mr. JENSEN. Yes. Well, even though the Congress does not get this appropriation through until August or September, I do not think you will suffer too much, even if you did not have a reserve. We do not want to spend any more money than we have to for this purpose.

The committee was quite liberal with you. In fact, I was quite instrumental in helping you get the 25 percent.

Mr. DAY. You were, and your help was much appreciated.

Mr. JENSEN. I know that there is a need for more money to be spent for the protection of fish and wildlife in the Territory. However, let us not use any more than we have to, and let us not have money lying around which we are not using. We can put that right back in the Treasury, where we need it pretty badly. I hope that you find that it is not necessary to keep that money in reserve. I cannot see any reason for it particularly.

Mr. DAY. That could be an error in judgment. We have had experiences, as I stated, in the past, when the appropriation bill was not signed until late in the operating season, and with our heavy expenditures and operations during the summer, the highest being in June, we felt it was wise to hold some in reserve. Perhaps our reserve may be too great.

Mr. JENSEN. You had better take another look at it.

Mr. DAY. Thank you. We will.

PROPAGATION AND DISTRIBUTION OF FOOD FISHES

Mr. JENSEN. For propagation and distribution of food fishes you are asking for $330,000 more than you had last year. Tell us why you ask for that increase.

Mr. DAY. $100,000 of that amount is for general maintenance. We have 92 fish hatcheries, many of which were badly run down during the war years and we are just now getting them back in shape. Many of them are ancient. Some of them are 60 or 70 years old.

We have included here a $100,000 increase for maintenance; $19,000 is an increase for the cost of the fish food, which is based upon the actual increases in market costs.

For the replacement of trucks there is $30,500; and for other equipment, such as grinders and processors and things of that kind around the hatcheries, there is $19,500; $6,000 is for the replacement of passenger-carrying cars that are badly worn out.

And for the operation of new and expanded fish facilities, all of which were included in this plan that I mentioned, which passed in 1950, as I recall it, there is $135,000.

ENGINEERING STAFF

We have included also $20,000 for engineering. We have no engineering staff to aid in the designing and improving of our fish hatcheries. There is a huge investment in these hatcheries, and we feel it is a matter of good business to have a small engineering staff to guide and advise on those items.

Mr. JENSEN. Do you not have some engineers in your department?

Mr. DAY. We have some engineers paid from wildlife funds but we do not have sufficient to adequately handle the total engineering problem.

Mr. JENSEN. Well, I rather think that is one item we can eliminate. I think you could get along very well with your present staff. I am just thinking out loud right now.

Mr. DAY. This would include half time for 5 engineers in our 5 regional offices.

Mr. JENSEN. You have gotten along pretty good so far without them. I am afraid if we give you more engineers the first thing you know you will start going backward instead of forward.

That has been the history of every agency in Government. When they get too many people the agency starts doing a poorer job than it did before. We do not want to start you on the downward road. You have been going along pretty good here. I think you can do it with the same personnel that you have.

I am just saying that out loud, so that I can remember it when we come to the markup, Mr. Day.

EXPENDITURES FOR CULTURE STATIONS BY STATES

Without objection I should like to have pages 10 through 17 and also pages 19 through 21 of the justifications inserted in the record.

(The matter referred to follows:)

PROPAGATION AND DISTRIBUTION OF FOOD FISHES

Increase of $330,000 over the 1954 base is requested for this activity, as shown on the following table which summarizes the costs of operating fish-cultural stations for stocking of waters and maintenance of fish screens and other protective devices, and the total increases requested over the 1954 base.

Hatchery	Base 1954	Permanent positions	Other personal services	Supplies, services, etc.	Automotive equipment	Other equipment	Estimate 1954	Increases
Alabama:								
Carbon Hill	$12,153	$112				$175	$12,440	$287
Marion	41,888	560	$4,300	$4,092	$3,800		54,640	12,752
Arizona: Williams Creek	29,916	2,918	1,500	10,491		1,000	45,825	15,909
Arkansas:								
Corning	14,528	167			1,500		16,195	1,667
Mammoth Spring	13,864	168					14,032	168
California: Coleman	132,043	1,176	2,475	2,025			137,719	5,676
Colorado:								
Creede	9,850	112		300			10,262	412
Leadville	26,563	112					26,675	112
Florida: Welaka	26,010	336				350	26,696	686
Georgia:								
Chattahoochee Forest	5,221	56		200			5,477	256
Cohutta	14,043	168				350	14,561	518
Millen	9,094	3,287	800	869			14,050	4,956
Warm Springs	15,888	168	1,500	1,519			19,075	3,187

Hatchery	Base 1954	Permanent positions	Other personal services	Supplies, services, etc.	Automotive equipment	Other equipment	Estimate 1954	Increases
Idaho:								
Hazerman (salmon [1])	$95,550	$448				$300	$96,298	$748
Warm River	8,760	−8,760						−8,760
Indiana: Rochester (Argos [1])	14,949	168	$1,200	$1,000			17,317	2,368
Iowa:								
Fairport	16,104	224					16,328	224
Guttenberg	15,585	168	400	200			16,353	768
Manchester	23,955	280	700	1,500			26,435	2,480
Kansas: Farlington	14,067	168	800	700			15,735	1,668
Kentucky:								
Frankfort		4,205	2,000	1,872			8,077	8,077
Louisville	10,490	−4,160	−3,000	−3,330				−10,490
Louisiana: Natchitoches	13,022	168	1,400	1,160			15,690	2,668
Maine:								
Boothbay Harbor	5,000	−5,000						−5,000
Craig Brook	23,614	224	2,100	3,212			29,150	5,536
Massachusetts:								
Berkshire	24,017	168		400			24,585	568
Gloucester	17,208	112					17,320	112
North Attleboro	10,367	2,862	500	621			14,350	3,983
Michigan:								
Charlevoix	11,412	112		300			11,824	412
Northville	24,005	224	1,100	1,200			26,529	2,524
Pendill's Creek	5,535	5,981	600	2,909			15,025	9,490
Minnesota:								
Homer	13,094	−12,334		−760				−13,094
New London	16,323	2,918	1,500	1,634			22,375	6,052
Mississippi:								
Lyman	18,437	224	1,800	1,600		200	22,261	3,824
Meridian	15,664	168	1,000	858	$1,500	1,500	20,690	5,026
Tupelo	17,530	168					17,698	168
Missouri:								
Bourbon	4,041	56					4,097	56
Neosho	19,946	224	1,300	1,700			23,170	3,224
Montana:								
Bozeman	33,851	224	825	675		350	35,925	2,074
Creston	19,222	224	200	1,100			20,746	1,524
Ennis	67,248	336		1,200			68,784	1,536
Miles City	9,802	112			2,000		11,914	2,112
Nebraska: Crawford	34,437	224	1,900	2,600			39,161	4,724
New Hampshire:								
Berlin	44,153	3,802	800	9,030	1,500	2,400	61,685	17,532
Nashua	29,320	280	3,400	3,925			36,925	7,605
New Mexico:								
Dexter	$17,951	224	3,200	2,325	1,500		25,200	7,249
Eagle Nest	1,800		1,200	1,300			4,300	2,500
Hot Springs	11,420	112	1,900	1,668		750	15,850	4,430
Santa Rosa	12,912	168	750	750			14,580	1,668
New York:								
Cape Vincent	11,507	112	4,500	4,231			20,350	8,843
Carpenter's Brook	6,162	56		500			6,718	556
Cortland	33,413	224	2,000	2,500			38,137	4,724
North Carolina:								
Edenton	9,704	112				1,000	10,816	1,112
McKinney Lake	16,378	168	2,300	1,800			20,646	4,268
Pisgah Forest	11,679	112		300			12,091	412
North Dakota:								
Bald Hill Dam	2,092		2,000	1,208			5,300	3,208
Valley City	11,376	112					11,488	112
Ohio:								
Hebron	19,796	2,918	1,250	1,111			25,075	5,279
Senecaville		4,160	3,600	3,638	1,500		12,898	12,898
Oklahoma: Tishomingo	22,281	3,030		1,014			26,325	4,044
Oregon: Delph Creek	10,491	112					10,603	112
Pennsylvania:								
Allegheny	14,494	112	500	444		2,400	17,950	3,456
Lamar	46,010	3,746	2,000	8,794	1,500		62,050	16,040
Rhode Island: Arcadia	6,901	112					7,013	112
South Carolina:								
Cheraw	13,557	112			1,500		15,169	1,612
Orangeburg (Orangeburg County)[1]	15,981	168			2,000	200	18,349	2,368
Walhalla	20,841	168	4,400	4,700		1,000	31,109	10,268
South Dakota:								
McNenny	45,488	9,908	3,000	10,379			68,775	23,287
Spearfish	12,025	168	1,200	1,300			14,693	2,668
Tennessee: Erwin	24,953	1,599		2,073		175	28,800	3,847

Footnote at end of table.

Hatchery	Base 1954	Permanent positions	Other personal services	Supplies, services etc.	Automotive equipment	Other equipment	Estimate 1954	Increases
Texas:								
Austin	$13,850	$168	$1,100	$900			$16,018	$2,168
Fort Worth	19,111	168	800	700			20,779	1,668
Inks Dam	9,570	112	700	500	$2,000		12,882	3,312
San Angelo	18,162	168	1,500	1,200	2,000		23,030	4,868
San Marcos	20,432	224					20,656	224
Uvalde	24,131	224			1,500		25,855	1,724
Utah: Springville	28,580	224		800		$750	30,354	1,774
Vermont:								
Pittsford	16,876	112	1,050	1,550	1,500		21,088	4,212
St. Johnsbury	12,158	112					12,270	112
Virginia:								
Harrison Lake	12,056	1,487	150	432		350	14,475	2,419
New Castle	6,100	56		500			6,656	556
Wytheville	28,178	280		1,100			29,558	1,380
Washington:								
Carson	16,228	224					16,452	224
Entiat	19,155	168	300	700			20,323	1,168
Leavenworth	103,402	784	2,860	2,340	1,500	400	111,286	7,884
Little White Salmon	8,709	112					8,821	112
Quilcene	35,477	5,780		3,368			44,625	9,148
Spring Creek	9,493	168					9,661	168
Winthrop	21,322	336	300	700		4,100	26,758	5,436
West Virginia:								
Leetown (Fort Belvoir, Va.; Moorefield, W. Va.)[1]	34,528	336		1,200			36,064	1,536
White Sulphur Springs	29,247	3,030	500	3,098			35,875	6,628
Wisconsin:								
Genoa	16,887	168					17,055	168
La Crosse	23,263	224		200	2,000		25,687	2,424
Lake Mills	16,914	168	250	250			17,582	668
Wyoming:								
Saratoga	26,509	224	1,200	1,600		1,750	31,283	4,774
Yellowstone Park	16,703	112	400	200			17,415	712
HEADQUARTERS								
Operation and maintenance of fish screens and ladders: Rock Island Dam, Wash	16,911	224					17,135	224
Yakima, Wash	15,692	112	750	750	1,500		18,804	3,112
Mussel propagation program, Carterville, Ill	18,068	168			2,000		20,236	2,168
Regional offices:								
Region 1: Portland, Oreg	35,093	3,306		930	1,400	100	40,829	5,736
Region 2: Albuquerque, N. Mex	42,201	3,418		930		100	46,649	4,448
Region 3: Minneapolis, Minn	39,381	3,362		930		100	43,773	4,392
Region 4: Atlanta, Ga	47,032	3,474		930	1,400	100	52,936	5,904
Region 5: Boston, Mass	42,696	3,418		930	1,400	100	48,544	5,848
Aquarium: Washington, D. C	19,641	168					19,809	168
Central office staff	136,321	1,135					137,456	1,135
Total	2,427,058	65,225	76,760	131,515	36,500	20,000	2,757,058	330,000

[1] Substations of hatchery units.

Increases requested in 1954 are for the following purposes:

(a)	General maintenance		$100,000
(b)	Increased costs of fish food		19,000
(c)	Equipment replacement, trucks	$30,500	
	Equipment replacement, other than automotive	19,500	
			50,000
(d)	Equipment replacement, passenger cars		6,000
(e)	Operation of new and expanded fish-cultural facilities		135,000
(f)	Engineering		20,000
	Total		330,000

(a) *General maintenance program, $100,000.*—Physical improvements at Federal hatcheries have an estimated total value of $23,589,049, as of March 1952. The tabulation shown below is broken down into 12 classifications and includes such items as buildings, ponds, raceways, pipelines, etc. As the table indicates, the sum of $751,924 is needed on an annual basis to provide a program for the adequate maintenance of Government property at the various fish-cultural stations.

The following tabulation lists the maintenance projects which will be undertaken if $293,700 is made available.

Hatchery	Type of maintenance	Cost
Alabama:		
Carbon Hill	Improve creek drainage; repair buildings	$3,000
Marion	Repair buildings and water-supply lines; divide large ponds	9,900
Arizona: Williams Creek	Repair buildings and roads	3,000
Arkansas:		
Corning	Repair buildings, roads, levees, and ditches	1,100
Mammoth Spring	Repair buildings and ponds	2,200
California: Coleman	Resurface station roads; replace troughs; repair buildings; repair Battle Creek Dam revetment; repaint buildings.	17,000
Florida: Welaka	Repair buildings	2,000
	Rebuild concrete bypass to Beecher Lake	2,000
Georgia:		
Cohutta	Repair buildings and ponds	1,100
Warm Springs	Install sewage facilities for office and repair buildings	3,000
Idaho: Hagerman	Repair buildings, roads, ponds, and fences	8,000
Indiana: Rochester	Deepen and regrade ponds	2,200
	Repair buildings	1,000
Iowa:		
Fairport	Regrade and resurface roads	1,700
Guttenberg	Repair aquarium tanks; repaint buildings	2,100
Manchester	Repair buildings and fences; replace water-supply and drainage lines.	4,500
Kansas: Farlington	Repair pond levees	1,500
Louisiana: Natchitoches	Repair water-supply lines	2,500
Maine: Craig Brook	Repair retaining wall; repair and paint buildings; grade and resurface roads.	3,000
Massachusetts: Berkshire	Replace hatchery troughs; finish surfacing roadways	3,300
Michigan:		
Charlevoix	Replace hatchery troughs	2,400
Northville	Repair buildings, trout ponds, and drain lines; reshingle quarters 1 and 2; replace sidewalks; repair fence.	8,000
Minnesota: New London	Repair ponds	900
	Retop roads	1,000
Mississippi:		
Lyman	Provide flood control ditch; repair pond outlets, extend pond drainage and deepen ponds, repaint buildings.	4,700
Meridian	Replace pond drain lines	1,800
Tupelo	Repair buildings and pond catch basin	2,500
Missouri: Neosho	Repair buildings, roads, water supply and drainage lines; replace railings and screens for trout ponds.	4,500
Montana:		
Bozeman	Repaint buildings; repair ponds	3,500
Creston	Repaint buildings; relocate oil house and gasoline tank	800
Ennis	Repair buildings, roads, and ponds	4,800
Miles City	Repair buildings	1,000
Nebraska: Crawford	Repair fish-food and cold-storage facilities, repair buildings and rearing ponds; repair warm-water ponds.	15,800
New Hampshire:		
Berlin	Repair ponds and diversion wall Cold Brook	8,300
Nashua	Replace hatchery troughs; regrade grounds	5,600
New Mexico:		
Dexter	Repair buildings	3,000
Eagle Nest	Replace pipeline to filter basin	2,500
Hot Springs	Repair water supply and drainage lines	1,500
Santa Rosa	Repair ponds	1,500
New York:		
Cape Vincent	Repair and paint buildings; renew dock	8,650
Cortland	Repair entrance road, buildings, and rearing facilities	12,500
North Carolina:		
Edenton	Regrade ponds	1,500
McKinney Lake	Paint and repair station buildings; repair holding ponds	5,600
North Dakota: Valley City	Deepen and regrade ponds	2,000
Ohio:		
Hebron	Repair roads and buildings; repair concrete ponds	1,700
Senecaville	Deepen and seal ponds; repair fish-holding facilities	4,100
Oklahoma: Tishomingo	Repair buildings and fences	4,500
Pennsylvania:		
Allegheny	Repair ponds and replace water supply lines	3,100
Lamar	Repaint buildings	1,500
Rhode Island: Arcadia	Resurface roads	1,000
South Carolina:		
Cheraw	Deepen station ponds	3,000
Orangeburg	Repair buildings	1,000
Walhalla	Repair buildings; repair raceways and water supply lines	13,100
South Dakota: Spearfish	Repair ponds	2,200
Tennessee: Erwin	Paint and repair buildings	3,000
Texas:		
Austin	Repair buildings and ponds	2,000
Fort Worth	Repair ponds, drain lines, and buildings	5,500
Inks Dam	Repair ponds	1,200
San Angelo	Repair buildings; repair water supply sump and water lines	6,200
San Marcos	Repair and replace pond supply and drain lines	3,000
Uvalde	Replace pond intake laterals; paint and repair buildings	3,350

Hatchery	Type of maintenance	Cost
Utah: Springville	Repair buildings and ponds	$3,000
Vermont: Pittsford	Repair buildings and bridge; replace hatchery troughs; repair ponds.	10,100
Virginia:		
Harrison Lake	Surface driveways; paint buildings; clean supply canal; repair pond catch basins; replace concrete walks.	2,800
Wytheville	Repair station roads and retaining walls	2,500
Washington:		
Entiat	Repair and replace domestic water supply lines; repaint residences.	3,500
Leavenworth	Repair furnace in residence; drill new well for hatchery	5,200
Winthrop	Repair dam, dike, and fish rack; repair residences	1,900
Yakima	Rebuild gantry crane at Sunnyside screen	1,500
West Virginia:		
Leetown	Paint and repair buildings; repair trout pools and drain lines; resurface roads.	4,200
White Sulphur Springs	Replace water supply lines and hatchery floor; repair ponds	3,000
Wisconsin:		
Genoa	Repair buildings, fences, ponds, and roads	1,000
La Crosse	Widen driveways; replace troughs in hatchery with concrete tanks.	3,500
Lake Mills	Regrade pond bottoms; repair buildings; provide parking area; repair fences; clean well.	3,500
Wyoming:		
Saratoga	Modernize fish food cold storage facilities; repair buildings	9,500
Yellowstone Park	Repair buildings	600
Total		293,700

EXPENDITURES FOR EXPANDED PROGRAM

Mr. GARDNER. I would suggest, Mr. Congressman, that on page 26 there is a detail of the estimate for the operation of the new and expanded facilities, showing the increases requested for each of the 28 stations which have been involved in that expanded program.

Mr. JENSEN. You would like to have those in the record?

Mr. GARDNER. Yes. It would support the largest item of increase.

Mr. JENSEN. All right. Without objection, it is so ordered.

(The matter referred to is as follows:)

Station	Cost of expansion	Current value	Production in pounds			Operational allotments	
			Current	With the increase requested	Potential	1953	Increase
Pendill's Creek, Mich	$150,500	$150,500	----------	6,500	13,000	$5,535	$9,434
New London, Minn	79,000	412,000	5,400	6,500	8,000	16,323	4,984
Meridian, Miss	97,000	169,000	2,600	3,500	3,500	15,664	1,858
Bozeman, Mont	59,600	300,600	25,000	25,000	25,000	33,851	----------
Ennis, Mont	189,102	345,102	70,000	70,000	80,000	67,248	----------
Berlin, N. H	85,000	331,000	39,000	55,000	80,000	44,153	12,240
Nashua, N. H	129,000	374,000	12,000	20,000	30,000	29,320	3,525
Dexter, N. Mex	45,500	351,500	2,500	5,500	7,000	17,951	2,525
Hot Springs, N. Mex	65,000	183,000	1,300	4,500	11,500	11,420	2,068
Cape Vincent, N. Y	70,000	319,000	700	2,000	2,000	11,507	1,731
Bald Hill Dam, N. Dak	125,000	125,000	350	800	1,500	2,092	3,208
Hebron, Ohio	193,000	367,000	3,400	5,500	7,500	19,796	4,411
Tishomingo, Okla	89,598	356,598	5,500	6,500	8,200	22,281	3,764
Allegheny, Pa	41,000	124,000	5,000	9,500	12,000	14,494	944
Lamar, Pa	175,000	456,000	22,000	40,000	60,000	46,010	11,904
McNenny, S. Dak	262,500	262,500	45,000	68,000	90,000	45,488	18,119
Erwin, Tenn	44,500	284,500	12,000	17,500	25,000	24,953	3,148
Harrison Lake, Va	50,000	221,000	1,000	2,000	3,500	12,056	1,657
Quilcene, Wash	270,160	452,160	31,000	38,500	50,000	35,477	8,868
White Sulphur Springs, W. Va	75,500	304,500	20,000	25,000	35,000	29,247	4,948
Total	3,406,560	8,182,560	453,950	579,800	767,300	715,858	135,000

NOTE.—Of the $135,000 requested for this purpose, $50,375 is for the pay of permanent employees; $23,250 is for temporary employees; and $61,375 is for supplies, services, etc.

AUTOMOTIVE VEHICLES

Mr. JENSEN. You have now 684 automobiles, trucks, and pickups. How many more trucks and pickups and automobiles are you asking for in this budget which is before us?

Mr. DAY. I will have to ask our budget people to answer that.

Mr. GARDNER. In connection with our refuge program we are asking for 44 automotive vehicles, 2 tractor crawlers, 3 farm tractors; or a total of 49 units, at an estimated cost of $130,000 of which $30,000 is in the base and $100,000 is requested as an increase.

Mr. JENSEN. How many passenger automobiles?

Mr. GARDNER. Eleven of the 44 vehicles are passenger cars.

Mr. JENSEN. Are you sure you can justify your request for that equipment which you just read off?

Mr. GARDNER. Yes, sir. All the equipment scheduled for replacement meets Bureau of the Budget standards, where applicable, both as to mileage and age.

We figure our annual replacement equipment requirements would require $465,050 a year, so that this increase is less than 30 percent of what we could justify on the basis of the Bureau of the Budget standards.

Mr. JENSEN. You know, 684 automobiles and machines of different types is quite a few.

Mr. GARDNER. Those are primarily trucks utilized in connection with the maintenance and operation of refuges.

Mr. DAY. We administer, Mr. Chairman, some 17 million acres of lands in wildlife refuges. There are 93 fish hatcheries—some of them large—on the west coast. There are quite a few other field stations. We have many field operations that are in need of cars.

Our people actually have been wearing our cars down to pretty much the rattletrap stage before we ask for funds for replacement.

BASIN SURVEYS

Mr. JENSEN. On page 36 you show a request for "Basin surveys" on a Federal-State cooperative basis. Could the States not finish up this work without further appropriation of Federal funds?

Mr. DAY. The "Basin surveys" that we have included here are designed to complete the specific basin surveys this year.

Now, these surveys are something that have been decided upon either by the Department or, in the case of the New York area, by the President, for a unified approach to water-resource development, of which the Fish and Wildlife contributes a small portion to the total job. These requests we have here are to complete certain specific studies. The States are cooperating. They are doing their share, but we of the Federal service have a major responsibility.

Mr. JENSEN. Is it not a fact that there never has been legislation authorizing you to make these expenditures?

Mr. DAY. No; there is a basic law that was amended, known as the Coordination Act. We merely carry out the studies as instructed by the Congress.

Dr. COTTAM. 1946.

Mr. DAY. This act requires the Service to cooperate with the States to make reports, which go in as a part of the reports of the Corps of Engineers and the Bureau of Reclamation. That is a requirement of the law.

Mr. JENSEN. Are you sure that is a law? Are you sure that is not just an Executive order?

Mr. DAY. It is a law, an act of August 14, 1946 (60 Stat. 1080), which requires the Service to conduct surveys throughout the United States of projects of the Corps of Engineers, the Bureau of Reclamation, and other Federal agencies, as well as projects licensed by the Federal Power Commission, to determine the effects of such projects upon fishery and other wildlife resources.

INVESTIGATIONS OF RESOURCES

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$4,173,986	$4,299,448	$4,180,000
Reimbursements from non-Federal sources	4,100	10,800	8,100
Reimbursements from other accounts	14,693	11,000	
Total available for obligation	4,192,779	4,321,248	4,188,100
Unobligated balance, estimated savings	−51,320		
Obligations incurred	4,141,459	4,321,248	4,188,100

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
1. Research on fish and fisheries	$2,573,363	$2,711,778	$2,501,778
2. Exploration, development, and utilization of fishery resources	1,083,637	1,108,192	1,166,229
3. Research on birds and mammals	415,666	479,478	511,993
Total obligations from appropriated funds	4,122,666	4,299,448	4,180,000
Reimbursements from non-Federal sources:			
4. Replacement of personal property sold	4,100	10,800	8,100
Total direct obligations	4,126,766	4,310,248	4,188,100
Obligations Payable Out of Reimbursements from Other Accounts			
1. Research on fish and fisheries	9,864	2,000	
2. Exploration, development and utilization of fishery resources	4,829	4,500	
3. Research on birds and mammals		4,500	
Total obligations payable out of reimbursements from other accounts	14,693	11,000	
Obligations incurred	4,141,459	4,321,248	4,188,100

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Summary of Personal Services			
Total number of permanent positions	566	611	610
Full-time equivalent of all other positions	78	49	37
Average number of all employees	580	622	614
Average salaries and grades:			
General schedule grades:			
Average salary	$4,533	$4,540	$4,581
Average grade	GS-6.5	GS-6.5	GS-6.4
Ungraded positions: Average salary	$4,762	$4,630	$4,733
Personal service obligations:			
Permanent positions	$2,372,578	$2,684,818	$2,760,199
Part-time and temporary positions	232,040	149,957	89,735
Regular pay in excess of 52-week base	9,058	11,322	11,056
Payment above basic rates	53,808	59,470	90,183
Total personal service obligations	2,667,484	2,905,567	2,951,173
Direct Obligations			
Appropriated funds:			
01 Personal services	2,662,166	2,901,372	2,951,173
02 Travel	166,039	151,597	149,592
03 Transportation of things	22,336	35,972	32,890
04 Communication services	41,435	41,855	44,905
05 Rents and utility services	49,779	58,910	60,429
06 Printing and reproduction	58,020	83,898	78,150
07 Other contractual services	392,242	280,275	263,295
08 Supplies and materials	427,454	438,138	398,464
09 Equipment	294,681	311,133	207,636
10 Lands and structures	7,205		
11 Grants, subsidies, and contributions		10	
13 Refunds, awards, and indemnities	110	20	
15 Taxes and assessments	8,355	6,404	6,659
Subtotal	4,129,822	4,309,584	4,193,193
Deduct charges for quarters and subsistence	7,156	10,136	13,193
Total obligations from appropriated funds	4,122,666	4,299,448	4,180,000
Reimbursements from non-Federal source:			
09 Equipment	4,100	10,800	8,100
Total direct obligations	4,126,766	4,310,248	4,188,100
Obligations Payable Out of Reimbursements From Other Accounts			
01 Personal services	5,318	4,195	
02 Travel	780	615	
04 Communication services	908	715	
05 Rents and utility services	2,613	1,930	
07 Other contractual services	2,610	1,600	
08 Supplies and materials	1,431	1,130	
09 Equipment	1,033	815	
Total obligations payable out of reimbursements from other accounts	14,693	11,000	
Obligations incurred	4,141,459	4,321,248	4,188,100

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$670,125	$653,603	$753,051
Obligations incurred during the year	4,141,459	4,321,248	4,188,100
	4,811,584	4,974,851	4,941,151
Deduct:			
Reimbursable obligations	18,793	21,800	8,100
Unliquidated obligations, end of year	653,603	753,051	683,051
Total expenditures	4,139,188	4,200,000	4,250,000
Expenditures are distributed as follows:			
Out of current authorizations	3,481,538	3,550,000	3,500,000
Out of prior authorizations	657,650	650,000	750,000

Mr. JENSEN. All right. Now let us go down to "Investigations of resources." In 1953 you had $4,299,448. This year you are asking for less. Are you sure that is not a little typographical error? You are asking for less than you did last year?

Mr. DAY. That is an utter truth, a reduction in the amount of $122,000.

FISHERY MARKET NEWS SERVICE

Mr. JENSEN. You think the Fishery Market News Service is worth what it is costing?

Mr. DAY. Yes, very much so. The basic information obtained by those market news offices is used by the fishing industry as a basis for planning their operations.

Mr. JENSEN. And the fishing industry pays nothing whatever for this service?

Mr. DAY. No. It is comparable in that respect to the Agricultural Marketing News Services that are put out by the Department of Agriculture.

Mr. JENSEN. Off the record.

(Discussion off the record.)

Mr. DAY. It is the same kind of a program for the fishing industry, as the farmers receive from the Department of Agriculture.

Mr. JENSEN. All right.

Mr. DAY. In the market news we have been badly underfinanced. It looks as though we will have to close up one quite important station unless we can secure this small increase of $30,000.

COOPERATIVE WILDLIFE RESEARCH UNITS

Mr. JENSEN. What would happen if the Federal Government withdrew its support of the cooperative wildlife research units in the colleges?

Mr. DAY. It might well close the 17 units that are now in operation and which has been the basic training program for young men entering the wildlife profession.

That is one of the most important and productive features of our total wildlife management effort. The States draw upon the graduates from these schools. The Federal Government does. All of the conservation departments do.

Graduates of those schools are now staffing and manning important positions in the total conservation field. It is one of the most important and popular activities that the service carries on.

CONSTRUCTION

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$1,263,742	$673,800	$305,000
Prior year balance available	412,680	829,302	
Reimbursements from non-Federal sources	2,520	1,900	1,900
Reimbursements from other accounts	963	429,500	
Total available for obligation	1,679,905	1,934,502	306,900
Balance available in subsequent year	−829,302		
Obligations incurred	850,603	1,934,502	306,900
Comparative transfer to "Administration of Probilof Islands, Fish and Wildlife Service"	−10,085		
Total obligations	840,518	1,934,502	306,900

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
1. Fish facilities	$639,946	$907,953	$275,000
2. Wildlife facilities	197,089	595,149	30,000
Total obligations from appropriated funds	837,035	1,503,102	305,000
Reimbursements from non-Federal sources:			
3. Replacement of personal property sold	2,520	1,900	1,900
Total direct obligations	839,555	1,505,002	306,900
Obligations Payable Out of Reimbursements From Other Accounts			
1. Fish facilities	691	45,650	
2. Wildlife facilities	272	383,850	
Total obligations payable out of reimbursements from other accounts	963	429,500	
Total obligations	840,518	1,934,502	306,900

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Summary of Personal Services			
Total number of permanent positions	17	26	4
Full-time equivalent of all other positions	56	230	21
Average number of all employees	71	252	24
Average salaries and grades:			
General schedule grades:			
Average salary	$4,533	$4,540	$4,581
Average grade	GS–6.5	GS–6.5	GS–6.4
Personal service obligations:			
Permanent positions	$83,509	$108,689	$18,470
Part-time and temporary positions	166,700	646,385	61,711
Regular pay in excess of 52-week base	320	435	158
Payment above basic rates	5,267	1,500	560
Total personal service obligations	255,796	757,000	80,899
Direct Obligations			
Appropriated funds:			
01 Personal services	255,048	561,638	80,899
02 Travel	20,926	22,050	1,500
03 Transportation of things	6,122	10,835	4,000
04 Communication services	1,373	1,400	50
05 Rents and utility services	63	695	
06 Printing and reproduction	1,033	2,080	150
07 Other contractual services	146,334	21,376	9,180
08 Supplies and materials	119,954	329,138	48,082
09 Equipment	85,330	22,160	29,100
10 Lands and structures	198,006	529,260	132,039
15 Taxes and assessments	2,884	2,470	
Subtotal	837,073	1,503,102	305,000
Deduct charges for quarters and subsistence	38		
Total obligations from appropriated funds	837,035	1,503,102	305,000
Reimbursements from non-Federal sources:			
09 Equipment	2,520	1,900	1,900
Total direct obligations	839,555	1,505,002	306,900
Obligations Payable Out of Reimbursements From Other Accounts			
01 Personal services	748	195,362	
02 Travel		3,300	
03 Transportation of things		5,300	
04 Communication services		200	
05 Rents and utility services		2,000	
06 Printing and reproduction		250	
07 Other contractual services	48	19,948	
08 Supplies and materials	167	131,340	
10 Lands and structures		71,800	
Total obligations payable out of reimbursements from other accounts	963	429,500	
Total obligations	840,518	1,934,502	306,900

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$569,067	$326,512	$629,614
Obligations incurred during the year	850,603	1,934,502	306,900
	1,419,670	2,261,014	936,514
Deduct:			
Reimbursable obligations	3,483	431,400	1,900
Unliquidated obligations, end of year	326,512	629,614	154,614
Total expenditures	1,089,675	1,200,000	780,000
Expenditures are distributed as follows:			
Out of current authorizations	1,089,675	400,000	160,000
Out of prior authorizations		800,000	620,000

Mr. JENSEN. Next is construction. In 1953 you had $673,800. For 1954 you are asking $305,000, which is a decrease of $368,800.

Now, there must be some good reason for that. Where are you getting the rest of your money for that purpose?

Mr. DAY. We are not.

Mr. JENSEN. You are not?

Mr. DAY. This decrease is only because we adhered to the Bureau of the Budget policy on construction. We need a great deal more, because we have much in the way of construction that should be done, but under the budget policy instructions, construction was to be held down this year and we have complied with that policy in these estimates.

CARRYOVER FUNDS

Mr. JENSEN. All right. Do you have a carryover of unexpended balance, or an unobligated carryover?

Mr. DAY. No, sir. The bulk of this construction request is to complete this year's portion of the expanded fishery program for buildings and structures and so on at the various hatcheries; $200,000 of this request is for the planned expansion of the hatchery program.

Mr. JENSEN. Without objection I would like to have page 82 placed in the record.

Mr. DAY. And 83, please?

Mr. JENSEN. All right. Without objection we will insert page 83, also.

(The matter referred to follows:)

Station	Total estimated cost	Actual and proposed application of funds appropriated to date				Estimate, 1954	Estimated appropriation required in future years
		Fiscal year 1950	Fiscal year 1951	Fiscal year 1952	Fiscal year 1953		
Frankfort, Ky	$381,000				$161,000	$62,000	$158,000
Craig Brook, Maine	395,500			$75,000		15,000	305,500
North Attleboro, Mass	501,400	$90,400	$117,500	60,000		30,000	203,500
Ennis, Mont	423,202	29,500	127,200	32,402		48,000	186,100
Crawford, Nebr	303,000				95,000	30,000	178,000
Hebron, Ohio	385,000	75,000	87,000	31,000		15,000	177,000
Total	2,389,102	194,900	331,700	198,402	256,000	200,000	1,208,100

The funds requested are to continue the construction and expansion program authorized by the Congress in the fiscal year 1950 for the continuation of the reconstruction of the Craig Brook, Maine, hatchery for which the Congress provided an initial appropriation of $75,000 in the fiscal year 1952; for the continuation of the reconstruction of the Crawford, Nebr., hatchery initiated by an appropriation of $95,000 in the fiscal year 1953; and to continue the construction of a new fish hatchery at Frankfort on Elk Horn Creek, Franklin County, Ky., authorized by Public Law 614, 81st Congress, and for which the Congress provided an initial appropriation of $161,000 in the fiscal year 1953. The North Attleboro, Mass.; Ennis, Mont.; and Hebron, Ohio, hatcheries were included in the 3-year construction program for expansion and improvement of the Federal hatchery system and completion within that period was contemplated.

There is listed below a breakdown, by hatcheries, of the items to be provided with the 1954 estimate of $200,000.

Frankfort, Ky.: 11 acres of warm-water ponds, 11 ponds at $4,000 per acre, $44,000; including 1,000 feet of 6- to 10-inch water-supply lines, $7,000; and drainage features 500 feet of 12-inch pipe and 11 outlet structures, $11,000	$62,000
Craig Brook, Maine: Concrete raceways, 300-foot double, 8 inches wide	15,000
North Attleboro, Mass.: Concrete raceways, 600-foot double, 8 inches wide	30,000
Ennis, Mont.: Fish-food and cold-storage building, masonry construction (35-ton capacity)	48,000
Crawford, Nebr.: Fish-food and cold-storage building, masonry construction (20-ton capacity)	30,000
Hebron, Ohio: Garage and storage building, 60 by 26 feet, 5-stall, brick masonry construction	15,000
Total	200,000

ADMINISTRATIVE EXPENSES

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$861,631	$898,198	$925,000
Transferred to "Salaries and expenses, defense production activities, Interior," pursuant to Public Law 253	−2,500		
Adjusted appropriation or estimate	859,131	898,198	925,000
Reimbursements from non-Federal sources	300	1,000	1,600
Total available for obligaiton	859,431	899,198	926,600
Unobligated balance, estimated savings	−4,325		
Obligations incurred	855,106	899,198	926,600

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Appropriated funds:			
1. Departmental expenses	$432,872	$443,065	$443,065
2. Regional office expenses	421,934	455,133	481,935
Total obligations from appropriated funds	854,806	898,198	925,000
Reimbursements from non-Federal sources:			
3. Replacement of personal property sold	300	1,000	1,600
Obligations incurred	855,106	989,198	926,600

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	166	165	169
Average number of all employees	151	162	166
Average salaries and grades:			
General schedule grades:			
Average salary	$4,533	$4,540	$4,581
Average grade	GS–6.5	GS–6.5	GS–6.4
Appropriated funds:			
01 Personal services:			
Permanent positions	$697,838	$741,785	$763,591
Part-time and temporary positions	789		
Regular pay in excess of 52-week base	2,684	2,900	3,008
Payment above basic rates	18,004	18,807	18,818
Total personal services	719,315	763,492	785,417
02 Travel	29,180	32,510	35,400
03 Transportation of things	2,294	2,901	2,900
04 Communication services	18,868	23,860	19,500
05 Rents and utility services	12,530	12,500	17,500
06 Printing and reproduction	10,640	14,585	13,500
07 Other contractual services	11,741	9,075	7,800
08 Supplies and materials	24,774	25,504	24,483
09 Equipment	24,229	12,612	17,200
13 Refunds, awards, and indemnities	25		
15 Taxes and assessments	1,210	1,159	1,300
Total obligations from appropriated funds	854,806	898,198	925,000
Reimbursements from non-Federal sources:			
09 Equipment	300	1,000	1,600
Obligations incurred	855,106	899,198	926,600

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$80,440	$72,497	$70,695
Obligations incurred during the year	855,106	899,198	926,600
	935,546	971,695	997,295
Deduct:			
Reimbursable obligations	300	1,000	1,600
Unliquidated obligations, end of year	72,497	70,695	75,695
Total expenditures	862,749	900,000	920,000
Expenditures are distributed as follows:			
Out of current authorizations	781,854	830,000	860,000
Out of prior authorizations	80,895	70,000	60,000

Mr. JENSEN. Getting down to your "Administrative expenses," I see that you have $898,198 for 1953, and you are asking $925,000 for 1954, which is an increase of $26,802. For what purpose is that?

Mr. DAY. $5,000 of the $26,802 is for the increased cost of rent at our regional office at Atlanta, Ga. This was an increase that was levied recently.

We have a slight increase of $4,588 for office machines and equipment, needed in our various field offices.

We are asking for four clerical positions, all in the regional offices, and $2,890 for "Travel."

This is all for the more efficient operation of the Service's regional offices, which handle all business in the field.

(Discussion off the record.)

ADMINISTRATION OF PRIBILOF ISLANDS

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$1,620,865	$1,995,698	$1,893,646
Prior-year balance available		325,942	1,145,640
Reimbursements from non-Federal sources	6,700	2,400	1,500
Reimbursements from other accounts	37,439		
Total available for obligation	1,665,004	2,324,040	3,040,786
Balance available in subsequent year	−325,942	−1,145,640	−1,204,286
Obligations incurred	1,339,062	1,178,400	1,836,500
Comparative transfer from—			
"Construction, Fish and Wildlife Service"	10,085		
"Fox and fur-seal industries, Pribilof Islands, Department of the Interior"	33,030		
Total obligations	1,382,177	1,178,400	1,836,500

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
1. Administration of Pribilof Islands	$1,338,038	$1,176,000	$1,835,000
2. Replacement of personal property sold	6,700	2,400	1,500
Total direct obligations	1,344,738	1,178,400	1,836,500
Obligations Payable Out of Reimbursements From Other Accounts			
1. Administration of Pribilof Islands	37,439		
Total obligations	1,382,177	1,178,400	1,836,500

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Total number of permanent positions	47	45	48
Full-time equivalent of all other positions	100	115	147
Average number of all employees	138	156	193
Average salaries and grades:			
General schedule grades:			
Average salary	$4,533	$4,540	$4,581
Average grade	GS–6.5	GS–6.5	GS–6.4
Crafts, protective, and custodial grades:			
Average salary	$3,286	$3,239	$3,280
Average grade	CPC–4.8	CPC–4.9	CPC–4.8
Ungraded positions: Average salary	$4,762	$4,630	$4,733
01 Personal services:			
Permanent positions	$191,059	$211,537	$238,206
Part-time and temporary positions	302,700	341,641	441,018
Regular pay in excess of 52-week base	811	832	898
Payment above basic rates	23,953	43,602	43,420
Total personal services	518,523	597,612	723,542
02 Travel	59,896	15,575	13,050
03 Transportation of things	29,657	48,900	75,000
04 Communication services	1,351	900	900
05 Rents and utility services	2,196	2,500	2,500
06 Printing and reproduction	2,226	1,350	850
07 Other contractual services	110,410	41,200	61,200
08 Supplies and materials	557,364	454,657	535,957
09 Equipment	73,736	26,700	155,800
10 Lands and structures			280,000
15 Taxes and assessments	1,355	2,148	2,000
Subtotal	1,356,714	1,192,542	1,850,799
Deduct charges for quarters and subsistence	11,976	13,142	14,299
Total direct obligations	1,344,738	1,178,400	1,836,500
Obligations Payable Out of Reimbursements From Other Accounts			
05 Rents and utility services	400		
07 Other contractual services	37,039		
Total obligations payable out of reimbursements from other accounts	37,439		
Total obligations	1,382,177	1,178,400	1,836,500

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year		$309,115	$485,115
Obligations incurred during the year	$1,339,062	1,178,400	1,836,500
	1,339,062	1,487,515	2,321,615
Deduct:			
Reimbursable obligations	44,139	2,400	1,500
Unliquidated obligations, end of year	309,115	485,115	920,115
Total expenditures	985,808	1,000,000	1,400,000
Expenditures are distributed as follows:			
Out of current authorizations	985,808	500,000	400,000
Out of prior authorizations		500,000	1,000,000

Mr. GARDNER. The increases in the 1954 budget amount to $833,646. That is after deducting nonrecurring items.

Mr. JENSEN. You have a net decrease of how much?

Mr. GARDNER. $102,052.

Mr. JENSEN. You are going to show a profit on the Pribilof seals for 1953. What was the net profit for 1952?

Mr. GARDNER. I do not recall. Of course, the appropriation was 60 percent of the receipts.

Mr. JENSEN. Yes.

Mr. DAY. Estimated total receipts are $3,156,078.

Mr. GARDNER. Yes. That is in the fiscal year 1953.

Mr. JENSEN. Are the sealskins cheaper than they were last year?

Mr. DAY. The average price per skin sold in the calendar year 1952 was $94.24 as compared to $95.35 per skin sold in the calendar year 1951.

Mr. JENSEN. Off the record.

(Discussion off the record.)

Mr. JENSEN. Without objection, I would like to have page 98 inserted in the record.

(The matter referred to follows:)

The following table shows the distribution of the 1954 base and of the increases over the 1954 base totaling $833,646 by purposes and classes:

Purpose	Base 1954	Other personal services	Supplies services, etc.	Equipment	Estimate, 1954	Increases
Island maintenance and operation	$212,085				$212,085	
Native supplies	70,500		$60,500		10,000	+$60,500
School program	34,250				34,250	
Medical program	32,800				32,800	
Operator of supply tender	125,690				125,690	
Byproducts plant	25,000		3,500		28,500	3,500
Curing and handling of sealskins	50,000				50,000	
Pay of Pribilof Aleut workmen	240,700	$145,000			385,700	145,000
Pay and allowances, nonresident Aleut workmen	107,000	16,000			123,000	16,000
Maintenance of Seattle supply terminal	10,000				10,000	
Fur-seal research	29,517				29,517	
General administration:						
Seattle headquarters office	40,170				40,170	
St. Paul Island	35,517				35,517	
St. George Island	19,130				19,130	
Departmental administration	27,641				27,641	
Construction and rehabilitation			516,000	$110,000	626,000	626,000
Subtotal	1,060,000	161,000	459,000	110,000	1,790,000	730,000
Reserve for contingencies					103,646	103,646
Total	1,060,000	161,000	459,000	110,000	1,893,646	833,646

REVENUES FROM BUREAU OPERATIONS

Mr. JENSEN. I would like to have you give us now the amount of revenues of all types, including the Pribilof seals, which have been taken in by the Fish and Wildlife Service, for every purpose.

Mr. GARDNER. We had a statement of receipts in our budget submission.

Mr. JENSEN. That is what I want, the total receipts.

Mr. DAY. May we insert that in the record?

Mr. JENSEN. I would like to know it right now.

Mr. GARDNER. Our receipts deposited in the general and special accounts in the fiscal year 1952 totaled $9,353,133.

Mr. JENSEN. Do you have your estimate for 1953?

Mr. GARDNER. Yes; the estimate for 1953 for the same accounts is $9,123,928.

Mr. JENSEN. That is from such things as the revenue which comes from the sale of firearms and ammunition, duck stamps, fishing licenses, and so forth.

Mr. DAY. That does not include the Pittman-Robertson or the Dingell-Johnston Acts.

Mr. JENSEN. Anyway, you know what we want. Give a full statement for the record of all receipts, and the amount that each State receives, and make it a complete statement so that we can see it all in one place.

Mr. DAY. You want it broken down by States? We have those tables.

Mr. JENSEN. Yes.

Mr. DAY. The allocation of the Federal-aid moneys for fisheries restoration, wildlife restoration, and the duck-stamp-receipts account, as well as some others, we will include in that statement.

(The matter referred to follows:)

I. COLLECTION OF RECEIPTS

Receipts collected for distribution by the Fish and Wildlife Service during the fiscal year 1952 amounted to $23,197,379. These receipts are classified as follows:	
(1) Proceeds from sale of stamp licenses to hunt migratory birds	$4, 335, 875
(2) Proceeds from sale of products from wildlife refuges	1, 608, 465
(3) Miscellaneous receipts	390, 724
(4) Proceeds from sale of wildlife products, Pribilof Islands	3, 326, 163
Total receipts collected by the Service	9, 661, 227
In addition to these amounts, there are collected the following revenues by the Internal Revenue Service for disposition by the Fish and Wildlife Service:	
(5) Taxes on fishing rods, creels, reels, artificial lures, baits, and flies	2, 857, 094
(6) Taxes on firearms, shells, and cartridges	10, 679, 058
Total receipts distributed by the Fish and Wildlife Service	23, 197, 379

II. DISTRIBUTION OF RECEIPTS

(1) *Proceeds from sale of stamp licenses to hunt migratory birds*

The entire amount of these receipts are deposited into the general fund of the Treasury. Amounts equal to these receipts each year are appropriated to the Fish and Wildlife Service for enforcement of migratory bird treaty acts and for acquisition, development, and maintenance of migratory bird refuges.

(2) *Proceeds from sale of wildlife products, Pribilof Islands*

The entire amount of these receipts are deposited into the general fund. Amounts equal to 60 percent of these receipts are appropriated to the Fish and Wildlife Service for administration of the Pribilof Islands. Amounts equal to 25 percent of the aforementioned receipts are appropriated to the Fish and Wildlife Service for management and investigation of fish and wildlife resources in Alaska, including construction.

In 1953 these appropriations amounted to the following:

(a) Administration of Pribilof Islands	$1, 995, 698
(b) Management of resources	831, 540
Total	2, 827, 238

(3) *Miscellaneous receipts*

The entire amount of these receipts are deposited in the general fund of the Treasury.

(4) *Receipts from the sale of surplus products from wildlife refuges*

These receipts are deposited in a special account of the Treasury earmarked for appropriation as follows:

(a) Expenses for sales, etc., in refuges, Migratory Bird Conservation Act	$32,000
(b) Management of national wildlife refuges	1,190,703
(c) Adjustments to appropriation	−11,139
(d) Payments to counties from receipts under Migratory Bird Conservation Act	396,901
Total	1,608,465

(5) *Taxes on fishing rods, creels, reels, artificial lures, etc.*

The receipts of $2,857,094 are distributed as follows:

(a) Deduction for administration of the act	$228,567
(b) Apportionment to States, Territories, Puerto Rico, etc	2,628,527

(6) *Taxes on firearms, shells, etc.*

The receipts of $10,679,058 are distributed as follows:

(a) Deduction for administration of the act	$533,953
(b) Apportionment to States, Territories, Puerto Rico, etc	10,145,106

III. DISTRIBUTION OF RECEIPTS BY STATES

(1) Receipts from the sale of surplus products from wildlife refuges are distributed to the States in accordance with section 401 (49 Stat., 383) as follows:

Alabama	$198.27	New Jersey	$73.31
Arkansas	350.47	New Mexico	628.41
California	2,608.87	New York	1,749.08
Delaware	44.30	North Carolina	8,566.15
Florida	477.80	North Dakota	13,454.16
Georgia	15,662.83	Oklahoma	9,326.36
Idaho	1,375.50	Oregon	28,528.36
Illinois	1,658.35	South Carolina	159.01
Iowa	662.01	South Dakota	1,258.70
Kentucky	626.93	Tennessee	80.67
Louisiana	242,540.62	Texas	6,811.50
Maine	308.44	Utah	1,156.44
Maryland	896.96	Vermont	42.53
Massachusetts	13.84	Virginia	608.48
Michigan	1,510.74	Washington	1,222.32
Minnesota	3,049.41	Wisconsin	2,660.42
Mississippi	7,196.13	Wyoming	37.25
Missouri	63.91	Alaska	64.50
Montana	10,067.62		
Nebraska	28,958.05	Total	396,900.92
Nevada	1,640.22		

(2) Amounts due the States, etc., from taxes on fishing rods, creels, reels, artificial lures, etc., are distributed in accordance with the act of August 9, 1950 (64 Stat., 430), as follows:

Alabama	$30, 379. 26	New Hampshire	$25, 085. 27
Arizona	40, 352. 21	New Jersey	25, 085. 27
Arkansas	43, 680. 29	New Mexico	44, 181. 33
California	125, 426. 35	New York	84, 276. 91
Colorado	57, 047. 64	North Carolina	42, 938. 90
Connecticut	25, 085. 27	North Dakota	26, 305. 54
Delaware	25, 085. 27	Ohio	97, 505. 36
Florida	45, 922. 78	Oklahoma	57, 210. 89
Georgia	28, 693. 13	Oregon	52, 026. 44
Idaho	43, 617. 31	Pennsylvania	73, 781. 59
Illinois	88, 892. 10	Rhode Island	25, 085. 27
Indiana	70, 497. 45	South Carolina	25, 085. 27
Iowa	49, 411. 85	South Dakota	34, 306. 16
Kansas	46, 786. 43	Tennessee	72, 754. 46
Kentucky	45, 404. 59	Texas	109, 380. 22
Louisiana	25, 085. 27	Utah	33, 497. 69
Maine	26, 730. 69	Vermont	25, 085. 27
Maryland	25, 085. 27	Virginia	39, 149. 61
Massachusetts	25, 085. 27	Washington	61, 000. 58
Michigan	125, 426. 35	West Virginia	26, 472. 36
Minnesota	125, 426. 35	Wisconsin	118, 895. 65
Mississippi	29, 402. 14	Wyoming	42, 715. 23
Missouri	80, 908. 33	Alaska	75, 000. 00
Montana	59, 982. 85	Hawaii	25, 000. 00
Nebraska	41, 850. 32	Puerto Rico	10, 000. 00
Nevada	35, 436. 96	Virgin Islands	10, 000. 00

(3) Amounts due the States, etc., from taxes on firearms, shells, and cartridges are distributed in accordance with the act of September 2, 1937 (50 Stat., 917), as follows:

Alabama	$178, 621. 62	New Hampshire	$57, 175. 93
Arizona	213, 059. 13	New Jersey	72, 551. 80
Arkansas	165, 665. 40	New Mexico	225, 029. 11
California	456, 639. 28	New York	400, 667. 24
Colorado	311, 023. 39	North Carolina	201, 505. 97
Connecticut	50, 125. 53	North Dakota	149, 848. 16
Delaware	50, 125. 53	Ohio	348, 276. 00
Florida	133, 265. 13	Oklahoma	190, 290. 38
Georgia	144, 925. 84	Oregon	245, 937. 71
Idaho	203, 710. 04	Pennsylvania	402, 528. 13
Illinois	289, 589. 99	Rhode Island	50, 125. 53
Indiana	230, 962. 98	South Carolina	101, 921. 83
Iowa	223, 522. 35	South Dakota	172, 598. 10
Kansas	216, 371. 81	Tennessee	211, 589. 91
Kentucky	157, 740. 48	Texas	501, 255. 30
Louisiana	173, 149. 32	Utah	190, 720. 49
Maine	119, 170. 82	Vermont	50, 125. 53
Maryland	63, 769. 24	Virginia	185, 625. 02
Massachusetts	64, 355. 61	Washington	275, 993. 12
Michigan	501, 255. 30	West Virginia	143, 526. 10
Minnesota	269, 457. 60	Wisconsin	283, 778. 48
Mississippi	153, 871. 79	Wyoming	200, 704. 28
Missouri	251, 207. 55	Alaska	75, 000. 00
Montana	341, 137. 26	Hawaii	25, 000. 00
Nebraska	207, 687. 26	Puerto Rico	10, 000. 00
Nevada	192, 921. 63	Virgin Islands	10, 000. 00

Nurseries in Minnesota and Wisconsin for Production of Buckthorn

Mr. Jensen. Here is a letter I received from the American Association of Nurserymen, signed by Richard P. White, executive secretary:

We have a problem with the Fish and Wildlife Service, Department of Interior in the operation of the Pittman-Robertson Act and the Dingell-Johnston Act that I feel should be called to your attention.

As you know, both of these acts provide for the collection of certain taxes on the sale of shells and fishing equipment which is to be used to develop the wildlife resources of the United States.

When I was in Minnesota and Wisconsin last month, I learned of the fact that the Fish and Wildlife Service in the Department of Interior was proposing to use funds collected under these two acts for the purpose of initiating nurseries in both of these States for the production of large quantities of buckthorn for distribution for Izaak Walton clubs and other private shooting and fishing clubs in these States.

I think the type of plant material they are now proposing to produce, will not include buckthorn, because as it happens this particular plant is susceptible to oat rust and is reputed to have caused terrific losses of the oat crop in Iowa and other surrounding States last year. So severe was the loss, in fact, that the State of Iowa is contemplating legislation, I am told, to prohibit the production, sale, and distribution of the susceptible varieties of buckthorn which are extensively used as hedge materials in the northern Great Plains States. It seems funny, therefore, to have another branch of the Government producing this buckthorn in great quantities and distributing it free to private shooting and fishing clubs. I have had this matter up with the Bureau of Entomology and Plant Quarantine and USDA, and I think they have made representations to the Department of Interior, through proper channels, to get this type of production stopped. However, the fact still remains that under the taxing provisions of these two acts, large sums of money have been raised that the Fish and Wildlife Service want to use for the establishment of nurseries for the production of nursery stock for distribution to Izaak Walton clubs and other private shooting and fishing clubs in these States. * * *

I certainly hope that you can clear this matter with the Fish and Wildlife boys when they appear before your committee, justifying their appropriations. It is my understanding that this movement stems from the regional headquarters of the Fish and Wildlife Service in Minneapolis, Minn.

With best personal regards, I am,

Cordially yours,

Richard P. White,
Executive Secretary.

Do you know anything about that, Mr. Day?

Mr. Day. I do not. It has not previously come to my attention. I should clarify for the record the fact that situations of this kind are the responsibility of the various State fish and game commissions. The 11 percent excise tax on arms and ammunition and the 10 percent excise tax on sports fishing tackle has been set aside by act of Congress for Federal aid to the States in wildlife and fisheries restoration work. The money is allocated to the States on formulas prescribed by the respective laws. The money is allocated to the States on the basis of those formulas.

The State fish and game commissions submit projects to the Service for financing with the help of these Federal funds. Seventy-five percent of project costs is paid from these funds, and 25 percent by the States. The guides which the Fish and Wildlife Service follow are designed to determine whether the projects are actually in the category of fish and wildlife restoration as defined by the acts.

It is true that some State fish and game departments in cooperation with the Soil Conservation Service and the Forest Service, and some-

times on their own, have established nurseries at which trees and shrubs beneficial as wildlife foods are planted in suitable areas throughout the country.

Mr. JENSEN. Who has done that?

Mr. DAY. The State fish and game departments. If the shrubs are planted on privately owned lands it is normally under an agreement with the landowner. Most of it is used on State-owned lands. All the equipment and all the lands acquired under these funds are State-owned.

The Federal Government allocates the funds and sees that the projects are in line with the policies established by the Congress but beyond that it is a State matter.

Mr. JENSEN. All right. Certainly the law does not give any State which receives contributions under the Pitman-Robertson Act or the Dingell-Johnston Act the privilege of producing any crop which would be destructive to the farmers of that particular State or any other State in the Union, or to the American people.

I know Mr. Richard White quite well. He has represented the American Association of Nurserymen for many years. I gather from this letter that he is greatly concerned about this. He says:

> I think the type of plant material they are now proposing to produce will not include buckthorn, because as it happens this particular plant is susceptible to oat rust and is reputed to have caused terrific losses of the oat crop in Iowa and other surrounding States last year. So severe was the loss, in fact, that the State of Iowa is contemplating legislation, I am told, to prohibit the production, sale and distribution of the susceptible varieties of buckthorn which are extensively used as hedge materials in the northern Great Plains States.

And this is the point:

> It seems funny, therefore, to have another branch of the Government—

meaning the Fish and Wildlife Service—

> producing this buckthorn in great quantities and distributing it free to private shooting and fishing clubs.

That is the thing, Mr. Day, I want you to look into.

Mr. DAY. I will do so. His statements seem contradictory as to the intent to produce buckthorn but I will agree with the gentleman that if it is a carrier of rust, an agricultural pest, it would be a mistake for the State fish and game commissions or anybody else to distribute it. This is all news to me, but I will look into it.

Mr. JENSEN. I am sure you will. I know what rust does to grain. I was born and raised on a farm. I have seen the finest fields of grain which you could imagine one day, and in 2 or 3 days that field of grain was a total loss because of rust.

We simply do not want the Government, Uncle Sam, to be a party to spreading that kind of disease on our farmlands. So, please take this very seriously and look into the matter and see to it that if this thing is going on it shall be stopped and stopped now.

Mr. DAY. We will look into it immediately.

The officials of the States that he mentions, Wisconsin and Iowa, will be in Washington at the National Wildlife Conference within the next 10 days, and I will talk to them personally about it.

Mr. JENSEN. Good. Thank you.

Transfer of Fish Hatcheries to States

Mr. Budge. Mr. Day, I notice that you have fish hatcheries in 42 out of the 48 States. You have mammal and bird refuges in a great number of States. Eventually will it not be possible for us to transfer some of these activities back to the individual States, rather than have the Federal Government continue to operate them?

Mr. Day. I may say, insofar as the fish hatcheries are concerned, that we have been moving in that direction.

Dr. Cottam. There have already been some transfers.

Mr. Day. On the Columbia River, where we have these tremendous problems on salmon, the Federal Government there has quite an interest in protecting the salmon, because the Federal Government is building most of the dams.

We have in the last few years been reducing the number of fish hatcheries. Since 1944 we have closed 32 hatcheries. We have opened 8 new ones, 5 of which are in connection with the Columbia River salmon program.

Another was at Millen, Ga., as a result of special legislation by the Congress.

Another was at Pendill's Creek, Mich., also by special legislation.

Another was at Attleboro, Mass., by the same token.

We now have 93 principal stations and 5 substations or rearing ponds, in connection with the stations, bringing the total of all to 98. We have definitely moved toward transfers in quite a few instances and closing in others, particularly as to some of the older hatcheries.

Mr. Budge. In this fiscal year is that program to be continued?

Mr. Day. There are three right now that we would like to close. May I say a little something off the record?

Mr. Budge. Yes.

(Discussion off the record.)

Cooperative Wildlife-Research Units

Mr. Budge. I have one more question, Mr. Day. Under your program for cooperative wildlife-research units I understood you to say in reply to the question of the chairman that if the Federal participation in that program were curtailed substantially or dropped, the States would probably cease their part of the program; is that correct?

Mr. Day. I think it would seriously cripple them.

Here is the way they are financed: The Wildlife Management Institute, which is a privately financed wildlife corporation, now headed by Dr. Gabrielson, former Director of the Service, puts in about five or six hundred dollars a year. The State land-grant colleges, of which there are 17 cooperating now, furnish office space, rent free, and things of that kind. The State fish and game departments put in certain funds, some even enough to employ assistant leaders in some institutions and some universities. The Fish and Wildlife Service's sole contribution is the unit leader. We pay his salary.

Do we pay his expenses, Dr. Cottam?

Dr. Cottam. Only in part.

Mr. Gardner. This increase is requested in order that we can pay expenses of our own unit leaders, really. On page 76 is the detail of that.

Mr. DAY. Yes, but the Federal program is really the key to this whole operation. It is a cooperative program. The States put in funds; the institutions put in some; but the largest part of them contribute only rentals.

Mr. BUDGE. On page 75 of your justifications you state this:

> Meanwhile, the college expenditures for wildlife instruction—heat, light, office equipment, secretarial and other services—have increased materially, and most of the cooperating State conservation departments have at least doubled their cash financial support to the units.

Then you go on and say that they provide most of the travel and supplies and materials and so forth.

Mr. DAY. Yes.

Mr. BUDGE. That would not lead me to believe that your guess as to their quitting the program is correct if the aid received from the Federal Government is not any greater than you have shown.

Mr. DAY. Well, they might continue it. I do not know. But I think it would seriously cripple the unified approach on the keeping of the cooperative-unit operations going as they have been. It has been a most productive organizational type of setup.

WILDLIFE REFUGE IN ARKANSAS

Mr. NORRELL. You have a duck refuge in my State and I am advised by the State and some of the towns down there that they desire to build a paved highway through the refuge in the vicinity of St. Charles, Ark., and across the river. I think it will be a Federal-aid highway.

First, I was asked how to do it, as to going through the reservation. How do you handle roads like that which go through the refuge? Do you have any jurisdiction over it at all?

Mr. DAY. Yes; we issue rights-of-way and permits for construction of roads across many of the refuges. We would object if the road were to seriously interfere with wildlife, and we would try to work out some alternate plan. But that is a common practice. We grant permits for roads, power lines, gas lines, and so on.

We had some difficulty with one of those areas, I think, down in your vicinity, where the contractor did not want to go through the necessity of requesting a permit, and as I recall he moved up to the edge of the refuge before he told us anything about it, and we had some difficulty with him, but I think that has been straightened out.

Mr. NORRELL. Could I ask you to determine how much of the road that goes through St. Charles and crosses the White River is in the Federal refuge down there? I would like to know the distance.

Mr. DAY. We can get that.

Mr. NORRELL. There is just one road there.

Mr. DAY. We will get that for you.

Mr. NORRELL. Have you ever constructed any highways or roads in the refuge in cooperation with the State? I do not recall that.

Mr. DAY. Yes, we have on occasion, I am sure, entered into cooperative agreements with the State highway commissions for construction of roads. Normally I think our contribution has been the right-of-way. I do not recall where we have ever used operating funds for that purpose.

Mr. NORRELL. Would you give that some special study, and when you submit your statement, state what, if anything, has been done.

Mr. DAY. You are interested in the road from St. Charles running across the White River Refuge to the east?

Mr. NORRELL. That is right.

Mr. DAY. Clear across the refuge?

Mr. NORRELL. Yes.

Dr. COTTAM. There is already a road there now.

Mr. NORRELL. Off the record.

(Discussion off the record.)

(The statement referred to follows:)

PROPOSED HIGHWAY ACROSS WHITE RIVER NATIONAL WILDLIFE REFUGE

The following statement is in answer to the request for information in connection with a proposed highway between St. Charles and Indian Bay across a part of the White River National Wildlife Refuge in Arkansas and Monroe Counties, Ark.

Your first question related to whether the Fish and Wildlife Service would agree to a highway across the refuge. While such a highway would make portions of the refuge more accessible for patrol purposes by Service personnel, it is our considered opinion that the disturbance to wildlife resulting from this highway and the opening up of this part of the refuge to the public would more than offset easier access for the Service. However, this Service would not object to the proposal if it is otherwise in the public interest. The Fish and Wildlife Service does not have funds available for participating in the cost of the proposed project.

The means of granting permission for the construction and maintenance of the highway would depend on whether the highway is within the Federal Aid Highway System. If it is, there is authority for the granting of an easement under section 17 of the Federal Aid Highway Act of November 9, 1921 (42 Stat. 216; 23 U. S. C. 18). Under this procedure the Arkansas State Highway Department would submit its application to the Bureau of Public Roads, which agency would refer the matter to this Department for clearance.

If the highway is not in the Federal Aid Highway System, the permission that can be granted under existing authority would be only a revocable permit, unless special legislation is enacted authorizing the granting of an easement.

The approximate distance across the refuge at the proposed location is about 3¼ miles, but may vary somewhat depending on the final location of the highway.

BLACKBIRD CONTROL

Mr. NORRELL. I have one other question. We started several years ago a little project down there regarding the blackbirds. I am just as anxious to stop that as I was to start it. Have you done all the work you can do on that? If you have, I should like to discontinue that appropriation.

Mr. DAY. Dr. Cottam, do you wish to answer that? I think you have been close to it.

Dr. COTTAM. Yes, I can say, Mr. Norrell, I think it is pretty well stopped. Through your generous efforts, and those of the committee, we got $10,000, as I remember the figure, to attempt to work out means of bird control. That was the blackbird.

Mr. NORRELL. Yes.

Dr. COTTAM. The red-winged blackbird primarily down there. It is a really serious problem. Much work has been done on it down there. Now that the work has been pretty largely done, it has been switched, with the exception that our people are still helping through cooperative work with your university people and your State fish and game department, and giving assistance. We have pretty much left them, with the promise that we will come in occasionally and help when we can to the extent we can contribute something further.

We are devoting most of the time now to the control of fish-eating birds in your fish areas.

Mr. NORRELL. You state that insofar as the blackbird is concerned your work is completed?

Dr. COTTAM. Pretty largely, yes, in that area. In other areas you have quite a different set of conditions. We have a problem right now in New Jersey. Part of that man's time, a small part only, is being diverted now to New Jersey.

Mr. NORRELL. If the committee should think it proper, then, to write out the blackbird control funds, it would be all right?

Dr. COTTAM. Well, I would say there are other species. I can assure you that the farmers are going to call loud for the use of that with other species, such as the fish-eating birds. You have a number of open fishing ponds in that area, and there has been quite serious difficulty.

Mr. NORRELL. But getting out the blackbird part of it would not affect the fishponds.

Dr. COTTAM. No. We are simply using those same funds on other species, trying to work out more effective control measures for the control of bird depredations and other activities.

Mr. NORRELL. Will you be through with the entire fund, then, this year?

Dr. COTTAM. Well, that is rather difficult to say. We have just gotten started.

Mr. DAY. I would like to say, Mr. Norrell, that while the situation has been cleared up insofar as Arkansas is concerned, we are into a blackbird problem which is just as bad, with as many complaints, from New Jersey and Maryland right now, as we were in Arkansas, when you put that fund in. We are proposing to send the same people to the Atlantic Coast to see what can be worked out there.

Mr. DAY. I would hate to say that the program is completed.

Mr. JENSEN. Mr. Budge has another question or two.

POSSIBILITY OF TURNING HATCHERIES AND REFUGES OVER TO STATES

Mr. BUDGE. Mr. Day, I have been thinking about your answer when I asked you about turning over some of these hatcheries and refuges to the individual States. Now, exclusive of those pertaining to the salmon industry, which is a little different problem, you stated that one of the most difficult things you had to do was closing a hatchery, because of local opposition. That, of course, would not be true if the State continued to operate the hatchery. Have you ever requested any of the States to take over the functions, or advised them that they were available for the States to take over?

Mr. DAY. We always do if we are proposing to close a hatchery. We explore it with the State to see if they would be willing to take it on.

Mr. BUDGE. What about the ones you are not proposing to close?

Mr. DAY. There has been some discussion. Normally the States are not anxious to assume additional burdens of expenditure at these hatcheries.

I cannot tell you offhand. I think a few have been turned over to the States. Some of this number I gave you, the 24, may now be operated by the States. Normally the States are not interested in taking them over and assuming the financial burdens.

We have a very closely coordinated program of planting fish. We plant in accordance with the cooperative stocking programs of the States.

Mr. BUDGE. Actually, you have had requests from States which want to take over some of these activities, have you not, which you have denied?

Mr. DAY. I do not recall any but there may be.

Mr. GARDNER. We turned the Flintville, Tenn., hatchery over to the State. I think in every State where the Government acquired title to the land and disposed of it it has been as a result of action by the Congress authorizing it.

Mr. DAY. I think we turned over a station in Utah, did we not?

Dr. COTTAM. Yes. We also turned one over in Tennessee.

Mr. GARDNER. You would be surprised at the number of fish hatchery sites on which stations are presently being operated which were donated to the Government by the States.

Mr. BUDGE. I appreciate that.

Mr. GARDNER. The fish hatchery at Hebron, Ohio, was a site, as I recall, which was donated to the Federal Government.

The hatchery site, or a portion of the site, at New London, Minn., was donated by the State.

Mr. BUDGE. Yes, and we have had for quite some time the philosophy that we have to look to the Federal Government for everything. I am trying to find instances where we can put some of these Federal functions back in the States.

I rather think from correspondence which I have had from my own State and some of the other States in the West—I do not know what your nationwide picture is, and that is why I am asking the question—that perhaps you could look in that direction and see if something could not be accomplished along that line.

Mr. DAY. Frankly, I do not know of any, but there may be some. We would be glad to explore it.

Mr. GARDNER. Of course, as you know, Congressman, many States operate hatcheries of their own.

Mr. BUDGE. Yes, I know that.

Mr. GARDNER. I do not know what percentage the stations operated by the Federal Government represent of the total.

Mr. BUDGE. I happen to live in a State which operates quite a few hatcheries.

GOVERNMENT COMPETITION WITH PRIVATE ENTERPRISE

Mr. JENSEN. In conclusion, let me add to what has already been said in connection with the letter from Richard P. White, executive secretary of the American Association of Nurserymen, and also in furtherance of what Congressman Budge has just said about his hopes that we can turn back a lot of these things to the States.

Now, there are nurseries all over the United States. I have many of them in my district. In fact, I think I have more nurseries in my district, and wonderful nurseries, than any other comparable area in the United States. There is Shenandoah, Iowa; Clarinda, Iowa; Hamburg, Iowa; and other places in my district, and those folks do a great job of producing every kind of nursery stock for which there is a market. They employ a lot of people, and they pay a lot of local, State, and Federal taxes.

As I know you gentlemen know, the American people, generally speaking, have spoken recently, and said, in effect:

> We want this private enterprise system of ours, which has made America great, to be preserved.

And so I certainly will not feel very kindly toward any Federal agency, whether it be the Fish and Wildlife Service, or any other, which would

lend its support in any way, shape, or form to giving private industry Federal competition where Federal competition is not required.

I shall not, of course, attempt to tell the States what they should do, but certainly if Minnesota and Wisconsin cannot furnish the necessary commodities which are needed for the Fish and Wildlife Service I am sure that we can furnish them from my district. However, I am sure that Minnesota and Wisconsin can furnish those from private enterprise there.

So, again I say, let us not get into any kind of business with the Federal Government. Let us not put the Federal Government into any kind of business which is not necessary and which might eventually destroy any line of business in the free-enterprise system of America.

Mr. DAY. May I say, Mr. Chairman, in connection with this subject that I heartily agree with you. Of my own knowledge many States have expended large sums of these Federal-aid moneys with private nurseries to purchase plants which are suitable for wildlife planting. Perhaps some are producing their own in cooperation with State forestry departments for some shrub species that are not normally available in private nurseries. However, I agree with your philosophy wholeheartedly.

As I stated earlier, we will take this up with the proper State officials and get to the bottom of it, and I will be glad to so advise you.

Mr. JENSEN. Thank you. I will be looking forward to getting your report on this matter and any other matter which is of interest to the committee.

(The further report referred to follows:)

The States have planted several million trees and shrubs on Pittman-Robertson projects. It is the States responsibility to procure and plant these. Some of the States have their own nurseries and supply trees to the Pittman-Robertson projects at cost of production providing these rates do not exceed the prices that private nurseries are charging for the same kind of planting stock. Since the end of the war, the States have experienced considerable difficulty in securing the amounts and kinds of stock that they need. The combined efforts of private and State nurseries have not caught up to the demands. Further, there are certain shrub species used for wildlife plantings that private nurseries do not produce or the production is small and variable. I believe the Minnesota Legislature finally authorized the Conservation Department to grow and distribute wildlife shrubs after it was found that the private nurseries could not meet the demands. In addition, that State purchased about a million and a quarter plants from private nurseries last year.

No Pittman-Robertson funds have been expended in either Minnesota or Iowa for establishing or financing the operations of tree and shrub nurseries. Assistance has been given to the establishment of a nursery in Wisconsin. This was done only after the State officials gave assurance that the stock could not be obtained from other sources. We have consistently encouraged the States to secure planting stock from commercial nurseries and approved project nursery operations only when there is no other source of desirable tree and shrub stock.

In addition to the foregoing, I have had the Pittman-Robertson project records in the Fish and Wildlife Service examined to get the facts with regard to the alleged planting of buckthorn. We found no instances in Wisconsin, Minnesota, or Iowa where a Pittman-Robertson project has financed the planting of buckthorn (Rhamnus), and to the best of my knowledge this species has never been planted under the program. If any such planting has been made on these projects, it is without the knowledge and approval of the Fish and Wildlife Service and any State claim for reimbursement for such an unapprovable activity will be disallowed. The tree- and shrub-planting projects, which we approve, specify the species and quantities to be used. The States cannot modify these without prior approval. Consequently, we have the control insofar as Pittman-Robertson funds are concerned, to prohibit the expenditure of these funds for planting tree and shrub species that are known to be detrimental to agriculture. I can assure you we have and will continue to use the authority vested in us to prevent any such improper activities.

THURSDAY, FEBRUARY 26, 1953.

NATIONAL PARK SERVICE

WITNESSES

CONRAD L. WIRTH, DIRECTOR
HILLORY A. TOLSON, ASSISTANT DIRECTOR
RONALD F. LEE, ASSISTANT DIRECTOR
FRANK T. GARTSIDE, ASSISTANT SUPERINTENDENT, NATIONAL CAPITAL PARKS
KEITH P. NEILSON, FINANCE OFFICER

Mr. JENSEN. The committee will come to order. We have before us Mr. Conrad L. Wirth, Director of the National Park Service, and his staff. We welcome you before the committee, gentlemen, and are ready to hear you justify your budget request. Go ahead, Mr. Wirth.

Mr. WIRTH. Thank you, Mr. Chairman. I appreciate the opportunity of justifying our appropriation request, and I shall do my best.

GENERAL STATEMENT

With your approval, I should like to file my general statement for inclusion in the printed record and read a few additional remarks which I believe will better help the committee to understand our problems.

GENERAL STATEMENT

The primary responsibility of the National Park Service, as stated in the act of August 16, 1916 (16 U. S. C. 1), is to promote and regulate the use of the national parks, monuments, and similar reservations in conformity with the fundamental purpose of such areas, which purpose is to "conserve the scenery and the natural and historic objects and wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." The Service has since been given many other responsibilities by the Congress.

Public use of the areas administered by the Service has increased so rapidly that it has not been possible to provide essential services. Campgrounds and other visitor-concentration points cannot be kept in a sanitary condition. It is not possible to keep comfort stations clean and serviced. Water, sewer, and electrical systems are taxed to the utmost. Protective and interpretive services essential, not only to safeguard the public but also to preserve park values, are far short of requirements. We are losing revenue where fees are charged because we cannot man checking stations or other points of fee collections on a full-time basis. Our buildings, utilities, and other physical facilities are deteriorating or are inadequate to meet current public needs. As a result, vandalism is increasing and many park features are being irreparably damaged or destroyed.

We have taken such steps as we can within our limited resources to make the visitors conscious of their responsibility to preserve their parks, and we are constantly endeavoring to streamline old methods or find new ways of meeting management, protection, interpretive, maintenance and operating problems. It is obvious to us, however, that additional fund resources are essential. We greatly lack the physical facilities required to meet public use, such as utilities systems, comfort stations, housing, roads, campgrounds, etc. Many of our facilities were designed for about half the use received and they should be expanded or replaced.

Just prior to World War II, it was becoming apparent to many of the States and their political subdivisions that the tourist industry had become a major industry and essential to the economy of the particular locality. This led to advertising by State and local governments, chambers of commerce, civic groups, private travel organizations, and others of points of interest. This added further to the

desires of the individual to travel. The Congress recognized the serious shortage of recreational facilities to meet the needs of the people by enacting the Park, Parkway, and Recreational-Area Act of 1936 (16 U. S. C. 17k–n), whereby this Service was authorized to make comprehensive studies of national, State, Territorial, and local recreational programs, and to cooperate with Federal and other governmental agencies in developing such programs. Improved standards of living, shorter working hours, paid vacations, better modes of transportation, more widespread educational opportunities, and the effects of motion pictures, radio, television, and other advertising media have combined to make us a nation of travelers. This is reflected in the greatly increased public use of Federal and local park and recreation facilities. State recognition of the economic value of the tourist industry has increased. Barring some major upheaval, which would change our way of living, it is inevitable that public use will continue to increase.

Our 1954 estimates are directed primarily to meeting day-to-day problems encountered in the parks, monuments, and other areas, where the brunt of the workload is experienced. Only the most urgent needs can be met within the amounts of the budget estimates. Additional protective and interpretive personnel to protect the visitor and park values and to collect fees are given primary consideration in our request under the "Management and protection" appropriation. The provision of more adequate maintenance and operation of roads, buildings, utilities, campgrounds, etc., constitutes our request under the "Maintenance and rehabilitation of physical facilities" appropriation. Completion of the Baltimore-Washington Parkway to a usable state; a minor amount of progress on other uncompleted parkways; and only the most essential roads, buildings, and other utilities represent our construction program. Funds for acquiring properties to complete the acquisition program for Independence National Historical Park and for some of the most critically needed privately owned lands and water rights are requested under our construction items. A small increase in our "General administrative expenses" appropriation would permit reestablishment of 4 positions formerly paid from this source in Washington, and the establishment of 2 additional positions in each of our 4 regional offices.

The National Park Service's 1954 estimates, compared with its 1953 appropriations, are summarized as follows:

Comparative summary of the 1953 appropriations with the 1954 budget estimates

Appropriation and activity	Appropriated 1953	Increase (+) or decrease (−)	Budget estimate, 1954
Management and protection:			
1. Management of park and other areas	$6,922,820	$+1,077,180	$8,000,000
2. Forestry and fire control	653,400	+36,600	690,000
3. Soil and moisture conservation	91,200	+8,800	100,000
4. Park and recreation programs	848,362	+71,638	920,000
5. Concessions management	270,768	+19,232	290,000
Subtotal	8,786,550	+1,213,450	10,000,000
Maintenance and rehabilitation of physical facilities:			
1. Roads and trails	4,138,495	+461,505	4,600,000
2. Buildings and utilities, etc	3,864,875	+735,125	4,600,000
Subtotal	8,003,370	+1,196,630	9,200,000
Construction:			
1. Parkways	8,104,700	−3,835,700	4,269,000
2. Roads and trails	4,674,740	−164,740	4,510,000
3. Buildings and utilities, etc	1,911,510	+3,638,490	5,550,000
4. Acquisition of lands and water rights	339,460	+3,250,540	3,590,000
Subtotal	15,030,410	+2,888,590	17,919,000
Construction (liquidation of contract authority):			
1. Parkways		+1,500,000	1,500,000
General administrative expenses:			
1. Departmental expenses	778,765	+18,000	796,765
2. Regional office expenses	563,235	+40,000	603,235
Subtotal	1,342,000	+58,000	1,400,000
Grand total	33,162,330	+6,856,670	40,019,000

I believe a short review of the concept and history of the national park system and the part it plays in the social and economical well-being of our country is of utmost importance.

The national-park idea took definite shape among a group of explorers around a campfire in Yellowstone in 1870, and that area, which is our first and largest national park, was established by Congress in 1872. The bill was signed by President U. S. Grant.

Several other national parks were established in the years to follow, but it was not until 1916 that the concept was fully recognized by Congress, for it was then that Congress established the National Park Service. Congress at that time said:

> The Service thus established shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations hereinafter specified by such means and measures as conform to the fundamental purposes of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

Today the Service administers 179 areas comprising over 24 million acres of land located in 38 States, the District of Columbia, Alaska, Hawaii, Puerto Rico, and the Virgin Islands.

The areas administered by the Service are those of outstanding national significance. They include the Nation's great scenic areas, such as Yellowstone, Yosemite, Grand Canyon, and Great Smoky Mountains National Parks; unique geological phenomena such as those of Carlsbad Caverns National Park; military parks and battlefields such as Gettysburg, the turning point in the War Between the States; places freighted with history such as Colonial National Historical Park, containing Jamestown Island, site of the first permanent English settlement in the New World, and Yorktown, where Cornwallis' surrender to General Washington virtually ended the American Revolution. These are closely integrated with Williamsburg, the city which represents the height of Colonial culture, and which has been reconstructed by John D. Rockefeller, Jr.

The system contains national parkways such as the famed Blue Ridge Parkway, which is to connect Great Smoky Mountains and Shenandoah National Park; memorials such as those to Washington, Jefferson, Lincoln, and Lee, here in the Nation's Capital, and Mount Rushmore commemorating Washington, Jefferson, Lincoln, and Theodore Roosevelt; places which kindle the patriotism of Americans, such as the Statue of Liberty National Monument, the symbol of our country's freedom, and Independence National Historical Park, the cradle of American freedom and democracy; and numerous places where we may see the homes of those who lived on this continent many centuries before the coming of the first European to its shores.

These and many other areas of great national significance are protected and maintained for the benefit and enjoyment of the people. The Government's capital investment in these areas, exclusive of the lands, is approximately $420,000,000. In addition, private capital has made extensive investment in facilities to provide lodging, meals, transportation, and other services to visitors. The National Park Service has a permanent staff of about 3,000 employees to administer, manage, maintain, operate, and develop the areas and facilities under

its jurisdiction. This staff is augmented by an additional 1,200 man-years of seasonal employment. The annual visitor load to the areas is now in excess of 42,500,000 and is increasing at a rate of about 10 percent each year.

The National Park Service is a small agency when measured in terms of number of employees or judged by the size of its appropriations. It is a large agency when measured in terms of natural resources, in terms of its visitor load, or in terms of its opportunity and possibilities to further among our own citizens an understanding and appreciation of our American way of life, and our national heritage. No other Federal Agency directly serves so many citizens with so small a staff or at so low a cost. The inspirational values of these great scenic and historic areas to the people of our country cannot be estimated; however, they are indeed great. We have also come to realize that this great national park concept has a direct, although difficult to measure, economic value. Last December I was invited by Governor Pyle of Arizona, to appear before a meeting in Phoenix of 11 western Governors, to tell them something of the National Park System and its value to the States. I presented a report to the Governors at that meeting. I would like to give you each a copy of that report and to have it incorporated in the record.

Mr. JENSEN. We cannot produce these pictures in the record.

Mr. WIRTH. All right. I would appreciate it very much if you could find the opportunity to look it over.

If the facts contained in the Yellowstone, Glacier, and Crater Lake National Parks economic studies, which are summarized in the report to the governors, and the studies made of the Great Smoky Mountains National Park are applied to the total visitation to all of the national parks of over 42,500,000 visitors it is easily realized that national park travel accounted for billions of dollars worth of business in 1952 and this business favorably affects every State of the Union. The areas of the National Park System cannot be classed as luxuries or a financial liability to the Nation. They are a tremendous social and economic asset; they pay tremendous dividends far exceeding the funds appropriated for their protection and the development of facilities to make them available for human use, inspiration, and enjoyment. They return to the Federal Government large dividends in sound conservation practices, in taxes, and in the well-being of its citizens by providing enjoyment, relaxation, and inspirational and patriotic benefits. The States receive even larger dividends, for their investment is practically nil and they reap all of the benefits of the travel business.

TAX REVENUES FROM NATIONAL PARKS

I would like to break off from my written statement at this point and mention a few things regarding taxes. In reviewing a concessioner's report, I was startled to find out how much Federal income tax the company paid. It ran over $271,000 in 1 year. I began to look into it a little bit over the weekend. I do not want to say that these figures that I am about to give you are accurate. We will try to have them more carefully studied by next year because I think we have a point here which should be taken into consideration.

In our tabulation on the taxes you will note that the concessioner's pay over $2,475,000 in Federal taxes, and $1,401,000 in State and

other taxes, making a total of $3,876,000. These people visiting the parks spend an average of a little over a day or may be a day and a half in the parks. Assuming they are on a 14-day vacation, traveling across the country, going and coming I have tried to find out what that meant in taxes throughout the country, and I come up with a figure which I am perfectly willing to give, but which I prefer to have checked and verified for presentation next year. If my basic figure and assumption is correct we have the business of handling the national park visitor throughout the country who pays about $54 million for Federal, State, and county taxes, of which $36 million would be Federal, and $18 million would be State and county. This does not include the income taxes paid by the individuals employed in handling the needs of the park visitor, it does not include the taxes on various commodities that the park visitor buys before they go on a vacation. The needs of the park visitor also provides employment, not only in the national parks, but in the small businesses throughout the country along the roads over which these people travel.

NATIONAL PARK'S CONTRIBUTION TO ECONOMIC STABILITY

I would like to make this statement, that I believe the national parks and their sister organizations in the States perhaps contribute as much, if not more, to economic stability and getting people to travel over the country than almost any other Federal activity. If we try to analyze our way of living in the United States we can't help but realize that one of the things that has made America great is the fact that we are able to travel back and forth and to see and enjoy those things that contribute so much to our national heritage. I believe that this fact has contributed greatly to our stability and also to our way of living, and it is basic to our economy, in my opinion.

BUDGET SUBMISSION

Now as to our budget submission. When I appeared before this committee last year we emphasized two main points in our request for funds. They were: (1) Our properties have been deteriorating shockingly due to the great impact of increased visitation and the lack of funds to maintain facilities properly. (2) Due to the lack of an adequate field staff, neither the visitors nor the properties were being adequately protected, nor was the Service collecting funds it should collect. We also pointed out the great need of additional construction funds to meet the demands of increased visitor use. However, we felt that the protection of what we already had was of primary importance so we asked for our greatest increase in those items. But that budget was by no means a cure-all. It was presented with the items properly related to one another but it had to be within the budget limitations which were placed upon us. This committee understood our problem and upon its recommendation the Congress gave us our full request for the "Management and protection," and the "Maintenance and rehabilitation" items, with some general overall cuts that were later applied to the entire Interior appropriation bill. You also gave us a good share of the small increase requested for general administrative expenses and before the appropriation bill passed, the Congress increased the budget items for construction funds by about

15 percent. We appreciate very much the thoughtful and understanding consideration which we received from the Appropriation Committees and Congress itself so I find it a little difficult to come before you again this year with many of the same problems we had last year and with even a few more serious ones.

Our request of a year ago actually provided fewer man-days than we had the year before the war when we had fewer areas and about half the number of visitors we have now. The amounts given us do not take care of the much needed ordinary day-to-day maintenance. It was based on what was thought to be a fair amount of funds to allot to the National Park System in comparison with the overall national requirements. From a sound operation and economical-management standpoint it was not, in our opinion, an adequate request. During this past year, we made further detailed studies of the problem and presented them to the Bureau of the Budget with a clear analysis of the facts. As a result, we are able to present a request this year which will take care of about 80 percent of our present-day needs for management and protection, and maintenance and rehabilitation. It will allow us to start, in a small way, on a much needed rehabilitation and deferred maintenance program which has now grown to $10,900,000. If this is not completed within a period of about 5 years, the result will be a much bigger budget for replacements. The construction items submitted take care of only a small amount of the campground and visitor-use facilities that are needed. It does not include any new roads as such and it just pecks away at the approved parkway program. We have a backlog of much needed buildings and utilities estimated at $158,268,000, roads and trails at $197,548,000, parkways at $190,860,000, and land purchase at $30,000,000, all of which is figured on present-day costs. The construction items of $17,919,000 in this budget request make a very small dent in this overall backlog of $576,676,000, about 3.2 percent of it, in fact. We estimate conservatively that travel will continue to increase around 3½ to 5 million people a year for the next 5 years if the condition of the country remains as it is, and we have every indication that it will. If this is so, we will have to revise our construction figures upward to provide additional facilities to take care of the increased use.

VISITOR LOAD

At this point, I should like to submit a set of charts that I believe will tell the story better than words. I should like also to include these charts in the record. I have a set of them before each one of you.

Mr. JENSEN. Mr. Wirth, charts of this nature with graphs can be put in the hearings, but they are very costly to reproduce. You explain the charts as best you can and I am sure that will suffice.

Mr. WIRTH. I do explain the one I refer to. The others are a build-up to the final one, and I come to the final one in a little explanation here.

Mr. JENSEN. All right, make up this one in tabulation form.

Mr. WIRTH. May I do this, after we get the proof may I go over my record to be sure that this material is explained perhaps a little better than I have done here?

Mr. JENSEN. Certainly, we always give you that privilege.

Mr. WIRTH. And then put it in in tabulation form?

Mr. JENSEN. Yes.

Mr. WIRTH. Thank you. Then I will not try to explain them verbally now, but I will go ahead with my statement.

(The tabulation referred to follows:)

A brief tabulation of charts filed with the committee

Fiscal year	Man-years available for maintenance, operation, and protection of the area administered	Percentage of man-years (plus or minus) compared with 1941	Percentage of increase in factors that bear directly on management, maintenance, and protection between 1941 and 1953
1941	4,344		8 percent increase in number of areas. 10 percent increase in acreage. 32 percent increase in miles of roads. 35 percent increase in miles of trails. 100 percent increase in visitation.
1953	3,319	−24	
1954 budget request	3,711	−15	
1954 requirements	4,650	+7	

Comparative travel statistics, 1941 and 1952

Month	1941 calendar year visitors [1]	Increase 1952 over 1941		1952 calendar year visitors
		Number	Percent	
January	497,690	497,485	99.9	995,175
February	590,290	752,508	127.4	1,342,798
March	741,332	797,350	107.5	1,538,682
April	1,591,795	1,193,121	74.9	2,784,916
May	1,807,675	1,657,724	91.7	3,465,399
June	2,561,975	3,144,291	122.7	5,706,266
July	3,965,148	4,243,846	107.0	8,208,994
August	4,619,184	4,010,649	86.8	8,629,833
September	2,241,270	1,912,451	85.3	4,153,721
October	1,367,416	1,694,703	123.9	3,062,119
November	805,225	763,398	94.8	1,568,623
December	390,193	627,865	160.9	1,017,968
Total	21,179,103	21,295,391	100.5	42,474,494

[1] 1941 was the largest travel year before World War II. It should be noted that the total travel figure for the months of June, July, and August of the 1952 travel year was greater than the total for the entire 1941 travel year, and that during 1952, 6 months ran over 3,000,000 visitors, while in 1941 only the months of July and August ran over 3,000,000 visitors.

The tabulation inserted has to do with visitor load. The other charts referred to translated our step-by-step appropriations into available man-years to handle management and protection and operation in the field areas. Other charts showed the increased facilities that have to be developed to handle the increased visitor load all of which add to our manpower requirements.

NEED FOR MORE MAN-YEARS IN THE FIELD

Briefly, they boil down to this: In 1941 we had 4,344 man-years in the field available for management and protection and maintenance; in 1953 fiscal year we have only 3,319 man-years, which is 24 percent less than we had in 1941. The budget now before you will provide for only 3,711 man-years which is still about 15 percent less than we had in 1941. Yet in 1953 we have 8 percent more areas, 10 percent more acres, 32 percent more miles of roads, 35 percent more miles of trails, and 100 percent more visitors than we had in 1941. Furthermore, all indications point to even a still further increase in these items during the 1954 fiscal year, for which the budget is now before you. It is reasonable to expect that this coming travel year will

bring around 46 million people to the parks as compared with the 42,500,000 people of last year and the 21 million in 1941. I do not want to create the wrong impression. We do not advocate that our available man-years in the field be increased in direct proportion to the increase in travel or acres, or any other item. That would not be logical. We have stretched and will continue to stretch our funds; we have steadily improved and will continue to improve our methods of operation, but there is a limit to the economies that can be taken and still protect investments in physical plants, the natural phenomena and historic objects and human life, and provide for the satisfactory use and enjoyment of the areas of the National Park System.

DONATIONS TO THE NATIONAL PARK SYSTEM

Just to indicate what we have been doing I would like to break away from the text right here. We have accepted funds, and we have gone out to encourage people giving us funds to help take care and develop the areas. Last year I brought this to your attention, and I would like to report progress, and I do not see why it should not be in the record. Last year we told you about Congressman Bennett, of Florida, who was putting up his Army disability allowance toward buying Fort Caroline, in Florida, which is now established. He raised more than $40,000, and we have the land. He has now given us, and I have right here from Mr. Bennett, his monthly disability check for $313, he has given us toward improvements and putting in a museum to make the area more usable for the people. I would just like to read into the record a paragraph from his letter, if I may. I do not think he would have any objection to putting it in.

In his letter to me dated February 18 he says:

> There is another matter which has been giving me some concern in this. I realize that the Federal Government is not likely to be enthusiastic about making large expenditures for the construction of a museum building in the immediate future. However, it has occurred to me that this should not delay planning operations; and further, that when plans have been sufficiently advanced, it may be possible for me to approach some private interest in an attempt to get donations for the building itself. Specifically, I have in mind that probably the Ford Foundation and the Rockefeller Foundation might be approached. Therefore, when plans have advanced to a point where a concrete proposal can be submitted to a proposed donor, I would certainly like to hear from you, and I may be able at that time to make some effort to obtain private funds for a building or buildings. I am not very optimistic as to what I can do in this in view of the great effort I expended in raising only a small amount for the lands; but, it may be worth trying, and I am willing to try,"

and he is still giving us his checks.

I would like also to say that here is a note saying that the Eastern Park & Monument Association is donating $1,000 toward acquiring land that we need down at Castillo de San Marcos for our administration area.

In other words, we are doing everything we can to get funds to help develop the National Park System. I have before me here a list of donations. I do not think it is necessary to put this list in the record. I will just put in a summary.

Since 1948 until January of this year, we have received 22 donations of land, amounting to 928,000 acres of lands, including State of Florida lands for the Everglades National Park, and the 8,000 acres from North Carolina for the Cape Hatteras National Recreation project.

We have received 5 donations of funds amounting to $3,423,000, and have bought 348,923 acres of land with it, and we have about $1,095,000 of these donated funds still on the books unexpended, of which about $400,000 is still unobligated.

We have what we call the National Park Trust Fund authorized by Congress where people can donate money to the Park Service. It has been more or less dormant until recently. We are now making a drive to get money into that fund and have received a donation of $7,500 for the purpose of preparing a brochure that we can put out to the people that might be interested in the National Park Service and willing to donate money to the trust fund to help us in the development and protection of the finer things in the parks, both scenic and historical. I just want to put that in the record. We are not just sitting idle and not trying to help ourselves along. We are working every day and trying to make the National Park Service a real value and credit to the United States and its citizens.

MAN-YEARS NEEDED FOR MANAGEMENT PROTECTION AND MAINTENANCE

As stated earlier, our budget now before you will take care of about 80 percent of our present-day needs for management and protection and maintenance and rehabilitation. We estimate that to meet reasonably well our man-year requirements for management, protection and maintenance for 1954 that we should have at least 4,650 man-years available: and that is only a little over 7 percent more than we had in 1941.

I cannot possibly overemphasize the tremendous impact of visitor use that your parks are receiving. I also question seriously whether our superintendents can manage their areas as they should be managed with the 4,650 man-years they have requested.

INCREASE OVER LAST YEAR'S BUDGET

At this point, I should like to point out just a few of the highlights of the budget request. I would like to point out that our budget looks like a big increase over last year, because last year we received $33,162,330, and this year our budget request is for $40,019,000, but there are four items in there which I would like to just mention at this point.

INDEPENDENCE HALL

One of the items is $3,265,000 that is needed to finish up the land acquisition at Independence Hall, National Historical Park in Philadelphia. This was authorized by Congress last year. It makes a big addition to our budget but is very important.

CARLSBAD NATIONAL PARK

Another item is $2,000,000 that is needed for the building of the new elevators at Carlsbad.

Now, Carlsbad National Park has returned to the Government in 20 years, $3,200,000, in round figures, over and above all costs. That includes maintenance, operation, improvements, and everything. We have worked it out very carefully, and we feel that when these elevators are constructed we could raise the fee from $1 to $1.50, and

that we could amortize the cost of these elevators for the Federal Government in a period of 12 years.

GRAND TETON NATIONAL PARK

In Grand Teton National Park we are asking for approximately $1,000,000 for putting in water and sewer which will make it possible for our concessioner there to put in about $4 million or $5 million worth of improvements in overnight accommodations and we would also serve the campground development from the same system. There are no campgrounds of any consequence in this park at the present time. Private capitol will spend 5 to the Government's 1 in providing greatly needed public service.

BALTIMORE-WASHINGTON PARKWAY

Then another big item in there is paying off the contractual authorization of $1,500,000 for the Baltimore-Washington Parkway. So, we have those particularly big items, which are improvement items, as we see it, and subtracting them from this year's request you will find that it reduces our request down to about $32,075,000, which is about $1 million less than we had for 1953.

I should say however, that we have over $6 million this year for the Baltimore-Washington Parkway, which might well be considered somewhat in the same category as those I have just mentioned. However, you will find that our increases in general, outside of these items, have gone into management, protection, maintenance, and rehabilitation.

OTHER INCREASES

Now getting back to my prepared statement: There is an increase of a little over $1,200,000 in the "Management and protection" items; over $1,075,000 of this increase is in the parks and other areas. In other words, it is directly out in the superintendents' hands. Under "Maintenance and rehabilitation," there is an increase of about $1,200,000. Every cent of this is for roads and trails and buildings and utilities in the field.

There is an increase of a little less than $2,900,000 in the "Construction" item. This includes a decrease of approximately $3,850,000 in parkways, and a slight reduction of about a $100,000 for construction of roads and trails. For buildings and utilities construction there is an increase of about $3,600,000. Of this, $2,000,000 is for the installation of a new elevator and the construction of the necessary buildings to go with them, at Carlsbad Caverns National Park. These elevators and appurtenant buildings are greatly needed. In what I am going to show you later you will readily see why. The charges for the use of the elevators will more than pay back the cost of construction in a relatively short time. About $1,000,000 is for water and sewer installations which must be built in Grand Teton National Park before the concessioner can invest around $4,000,000 to provide a badly needed new lodge and cabins and before we can develop a campground for the use of the public. $280,000 is for Glacier National Park. There the revamping and rehabilitation of a Government-owned hotel building, and installing a sprinkler system in it are

essential before the Glacier Park Hotel Co. can proceed with additional buildings of their own. It is all part of one operation.

Under "Land and water rights" there is an increase of about $3,250,000 but this increase is more than taken up by the $3,265,000 item needed to finish up property acquisition at Independence Hall National Historical Park project in Philadelphia.

These are just the large items, which are covered along with others in considerable detail in our justification.

DETERIORATION IN NATIONAL PARKS

It is very difficult to measure in concrete terms the many real values of the national-park system and of the cooperative work that the Service carries on with other Federal and State agencies working in the recreation field. However, they are there in large doses. We all realize it; and because they are, it is hard for me and it must be hard for others who give it serious thought, to understand why during the times of prosperity; times of great advancement in our economic conditions; times of advancement in our standards of living, yes, in times when individuals are getting so much social and economic benefit out of their great scenic and historic treasures, we are unable to get even the bare necessities to protect these treasures. Treasures that in themselves play an important part in our progress as a nation. Treasures, and the concept of their protection and use for present and future generations, which are the envy of freedom loving people all over the world. The cost is very little when you consider their value to the Nation and their cost compared to the total national budget. Yet, their loss or even a serious deterioration in quality would be a terrible reflection on our generation in the history of the Nation.

I have just one more string to my bow. I want to show you about two dozen color slides picturing what is happening to the national-park areas due to the lack of sufficient appropriations. Before I do this, however, I want to avoid any misunderstanding that might arise from the statements I have already made. First, I am justifying our budget estimates of $40,019,000 and am not asking that you increase that amount. While this represents an increase over last year, it should be understood that that amount will not cure the condition we find ourselves in or solve all of the problems that will be seen on the slides that are to follow. I have just tried to paint a clear picture of the state of affairs of your national park system which I feel sure Congress should know about. In our opinion, this state of affairs is not good. I should like to make one request, and that is that this committee visit the areas of the national-park system this coming summer and study the conditions so that you may check my statements before we submit our next budget request.

MANAGEMENT AND PROTECTION

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$8,175,000	$8,786,550	$10,000,000
Prior year balance reappropriated	74,448		
Reimbursements from non-Federal sources	6,678	7,000	7,000
Reimbursements from other accounts	84,918	29,703	18,751
Total available for obligation	8,341,044	8,823,253	10,025,751
Unobligated balance, estimated savings	−28,873		
Obligations incurred	8,312,171	8,823,253	10,025,751

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
1. Management of park and other areas	$6,469,772	$6,922,820	$8,000,000
2. Forestry and fire control	592,535	653,400	690,000
3. Soil and moisture conservation	88,627	91,200	100,000
4. Park and recreation programs	811,420	848,362	920,000
5. Concessions management	258,221	270,768	290,000
Total obligations from appropriated funds	8,220,575	8,786,550	10,000,000
Reimbursements from non-Federal sources:			
6. Replacement of personal property sold	6,678	7,000	7,000
Total direct obligations	8,227,253	8,793,550	10,007,000
Obligations Payable Out of Reimbursements From Other Accounts			
1. Management of park and other areas	54,530	21,693	13,316
2. Forestry and fire control	125		
4. Park and recreation programs	30,263	8,010	5,435
Total obligations payable out of reimbursements from other accounts	84,918	29,703	18,751
Obligations incurred	8,312,171	8,823,253	10,025,751

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Summary of Personal Services			
Total number of permanent positions	1,458	1,501	1,625
Full-time equivalent of all other positions	300	361	479
Average number of all employees	1,665	1,821	2,063
Average salaries and grades:			
General schedule grades:			
Average salary	$4,632	$4,679	$4,694
Average grade	GS–6.8	GS–6.8	GS–6.8
Crafts, protective, and custodial grades:			
Average salary	$3,326	$3,340	$3,351
Average grade	CPC–5.0	CPC–4.9	CPC–4.9
Ungraded positions: Average salary	$3,245	$3,370	$3,404
Personal service obligations:			
Permanent positions	$5,838,456	$6,328,527	$6,890,167
Part-time and temporary positions	887,419	1,085,449	1,441,507
Regular pay in excess of 52-week base	22,542	24,434	26,587
Payment above basic rates	149,265	146,225	169,799
Total personal service obligations	6,897,682	7,584,635	8,528,060

Obligations by objects—Continued

Object classification	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
01 Personal services	$6,836,222	$7,557,033	$8,511,659
02 Travel	209,019	187,529	227,569
03 Transportation of things	33,326	33,061	34,538
04 Communication services	50,007	51,261	55,758
05 Rents and utility services	221,697	267,863	315,730
06 Printing and reproduction	114,257	116,189	147,759
07 Other contractual services	203,862	168,174	177,421
Services performed by other agencies	85,850	13,635	17,135
08 Supplies and materials	228,360	251,639	311,635
09 Equipment	216,664	120,303	174,996
13 Refunds, awards, and indemnities	2,843		
15 Taxes and assessments	18,468	19,863	25,800
Total obligations from appropriated funds	8,220,575	8,786,550	10,000,000
Reimbursements from non-Federal sources:			
09 Equipment	6,678	7,000	7,000
Total direct obligations	8,227,253	8,793,550	10,007,000
Obligations Payable Out of Reimbursements From Other Accounts			
01 Personal services	61,460	27,602	16,401
02 Travel	8,267	611	
03 Transportation of things	368		
04 Communication services	4,298		
05 Rents and utility services	443	603	500
06 Printing and reproduction	483		
07 Other contractual services	1,352	500	500
08 Supplies and materials	3,228	34	
09 Equipment	4,908	325	1,350
15 Taxes and assessments	111	28	
Total obligations payable out of reimbursements from other accounts	84,918	29,703	18,751
Obligations incurred	8,312,171	8,823,253	10,025,751

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$868,099	$624,144	$810,694
Obligations incurred during the year	8,312,171	8,823,253	10,025,751
	9,180,270	9,447,397	10,836,445
Deduct:			
Reimbursable obligations	91,596	36,703	25,751
Adjustment in obligations of prior years	251,390		
Unliquidated obligations, end of year	624,144	810,694	810,694
Total expenditures	8,213,140	8,600,000	10,000,000
Expenditures are distributed as follows:			
Out of current authorizations	7,389,508	8,000,000	9,200,000
Out of prior authorizations	823,632	600,000	800,000

THE VIRGIN ISLANDS NATIONAL HISTORIC SITE

Mr. JENSEN. Mr. Wirth, why cannot the Virgin Islands government handle the expense of their own new national historic site?

Mr. WIRTH. We feel that is a national historic site, just like any other national historic area, and it ties into the national picture of the development of the country, and it tells the early history of the development of the United States, or that part of it.

Mr. JENSEN. Do they contribute anything toward its upkeep?

Mr. WIRTH. Yes, they have been contributing up to the present time.

Mr. TOLSON. They have acquired some property, and also, through discussions with the proper representatives of the Netherlands Government, they received quite a contribution in the way of original and reproduced pieces of furniture for the Government House in the historic site.

Mr. JENSEN. I have heard about that.

Then you consider that we should treat the Virgin Islands as we treat any State in the Union or any other Territory?

Mr. WIRTH. Yes, sir.

POLICING THE BALTIMORE-WASHINGTON PARKWAY

Mr. JENSEN. Why does it take 11 policemen to police 7 miles of Baltimore-Washington Parkway?

Mr. GARTSIDE. The request is for 11 policemen, 1 sergeant and 10 privates. That will provide 1 cruiser on a full-time basis for policing that 7-mile section.

Mr. JENSEN. Is that necessary?

Mr. GARTSIDE. Yes, sir, absolutely. I have here some pictures of accidents that occurred last year in our parks. In addition to that we have the problem of trying to enforce the laws and regulations. It is a 24-hour detail.

Mr. WIRTH. They are not all on at the same time. You have to provide for leave, off hours, and holidays.

Mr. GARTSIDE. It requires 5 men to cover 1 continuous duty post, to comply with the 40-hour workweek.

LAND UNDER SUPERVISION OF THE NATIONAL PARK SERVICE

Mr. JENSEN. How many acres of land are under the supervision of the National Park Service?

Mr. WIRTH. The total area of the national park system, including Federal land, and private holdings within the exterior part of the boundary lines as established by law is 24,351,969.64 acres.

Mr. JENSEN. Twenty-four million and what?

Mr. WIRTH. 24,351,000. Within that area there are 511,744 acres of private land. All of the rest of it is federally owned. I can give you that figure too, if you wish. That is as of June 30, 1952.

SOIL AND MOISTURE CONSERVATION

Mr. JENSEN. Do you receive any assistance from the Soil Conservation Service of the Department of Agriculture in any way for soil and moisture conservation?

Mr. WIRTH. Yes; we do.

Mr. TOLSON. We receive no direct funds from them but we get technical advice from them. The item we have here of $100,000 for 1954 is our total soil and moisture item.

Mr. JENSEN. That is actually all the money that is expended for soil and moisture conservation on this 24,351,000 acres of land?

Mr. TOLSON. That is correct.

Mr. WIRTH. Yes sir; that is correct. We do consult with the Soil Conservation Service and with the Forest Service and others on joint projects, because our problems sometimes go across the boundary

lines. We do get really a great deal of technical advice and help from them.

Mr. JENSEN. From a quick calculation it appears to be a quarter of a penny an acre for that purpose.

Mr. TOLSON. That is right. Out of 180 areas administered by the National Park Service, we have erosion problems on 70 of them. The acreage on which we have erosion problems totals around 4,500,000.

Mr. JENSEN. That would be about 2 cents an acre. You are not keeping up with erosion at all; you are losing ground every minute.

Mr. WIRTH. Yes, sir.

Mr. TOLSON. We would need at least $200,000 a year, over a period of years to solve our erosion problems.

Mr. JENSEN. Of course, as you know, I am almost a fanatic on soil conservation, and "in my book" to spend only 2 cents per acre for soil and moisture conservation on the national park lands is criminal. We are committing a crime against ourselves and against the coming generations by so doing.

Mr. WIRTH. I might add this to that, Mr. Chairman, that we are creating more soil erosion problems every day, increasing them through the overuse of inadequate developments. That is one of our problems. As Mr. Tolson says, there is about $200,000 a year needed now in order to check it. That is going to increase unless we check it.

LACK OF SOIL CONSERVATIONISTS

Mr. JENSEN. Do you have any soil conservation technicians in the National Park Service?

Mr. WIRTH. Yes, we do.

Mr. JENSEN. How many?

Mr. WIRTH. I could not tell you offhand.

Mr. TOLSON. We have three soil conservationists in the National Park Service.

Mr. JENSEN. To look after 24,351,000 acres of land?

Mr. TOLSON. Yes, sir; that is correct.

Mr. WIRTH. I might say that is all we need to spend that $100,000.

Mr. JENSEN. I can understand that very readily.

Mr. WIRTH. We do not want to get topheavy in organization and not get the money into the field.

Mr. JENSEN. The Soil Conservation Service technicians do come in and give you technical help?

Mr. TOLSON. Yes, sir.

Mr. JENSEN. But you do not have sufficient money to do much after they have told you what you should do?

Mr. TOLSON. No; this only covers the very urgent erosion problems, Mr. Jensen.

EFFECT OF SOIL EROSION ON DAMS

Mr. JENSEN. And the soil erosion in the national park lands washes down on to private property, and is a detriment to them. The soil flows into the streams and into the big dams where it is a terrible detriment.

Mr. WIRTH. That is right.

Mr. JENSEN. Then we build up great silt beds in these big dams.

Mr. WIRTH. We lose the value of our dams because they fill up with silt.

Mr. JENSEN. That just cannot go on.

FUNDS NEEDED TO RESTORE ALL ERODED LANDS

Mr. TOLSON. The total estimate of funds needed for soil erosion in the national park system today is $4,504,000.

Mr. JENSEN. The figures in the justification indicate that the total acreage is 16,782,346. Where is the discrepancy?

Mr. WIRTH. That is a total figure, of which 4,500,000 acres need one form or another of erosion treatment.

Mr. TOLSON. To put it another way, that tabulation shows we need $4,504,000 to handle the program. And, to handle the emergency soil-erosion program, we need $1,685,000. We are requesting $100,000 for 1954.

Mr. JENSEN. Without objection, we will insert the table on pages 29 and 30 in the record.

(The matter referred to is as follows:)

The 1954 estimate in relation to overall soil and moisture program

State	Total NPS land area (acres)	Estimated cost to restore depleted lands [1]	Soil and moisture appropriations		Estimate, 1954
			Total to June 30, 1952 [1]	Appropriation 1953	
Ala	963	$5,000			
Arizona	2,659,297	530,000	$62,044	$6,000	$6,000
Arkansas	1,019	3,000			
California	4,013,603	400,000	24,803	9,000	7,500
Colorado	528,204	273,000	2,700		
District of Columbia	7,060	110,000	32,978	5,000	5,000
Florida	1,305,864	65,000			1,500
Georgia	15,624	15,000	3,727		
Idaho	79,492	32,000			
Iowa	1,000	4,000			1,500
Indiana			485		
Kentucky	50,812	508,000	90,840	2,000	2,000
Louisiana	70				
Maine	28,620	8,000			
Maryland	22,574	4,000			
Massachusetts	13				
Michigan	133,839	14,000			
Minnesota	116				
Mississippi	14,245	582,000	113,217	7,700	7,700
Missouri	293		250		
Montana	1,142,482	114,000			
Nebraska	2,359	24,000	37,043	9,000	11,500
Nevada	805,707	40,000			
New Jersey	958	7,000			
New Mexico	236,695	237,000	141,294	15,500	17,000
New York	2,370				
North Carolina	305,776	90,000	25,912	3,000	3,200
North Dakota	62,414	125,000			
Ohio	82				
Oklahoma	912	1,000	10,357		
Oregon	160,770	40,000			
Pennsylvania	3,427	25,000	4,066		2,500
South Carolina	4,019	8,000	292		
South Dakota	154,193	31,000	3,140	4,500	3,500
Tennessee	241,648	65,000	3,795	1,200	1,300
Texas	692,305	70,000	13,314	4,500	5,000
Utah	286,609	500,000	53,214	6,000	6,000
Virginia	250,391	150,000	105,457	17,300	18,300
Washington	1,226,103	123,000			
Wyoming	2,340,418	301,000		500	500
Total	16,782,346	4,504,000	728,838	91,200	100,000

[1] Excludes contributions.

Contributions: Estimate for 1953, $23,203; estimate for 1954, $31,240.

HYDROLOGICAL STUDY IN MAMMOTH CAVE

Mr. JENSEN. Is the hydrological study in Mammoth Cave something the Geological Survey should be doing?

Mr. WIRTH. We have an agreement with the Geological Survey to make that study, sir.

Mr. JENSEN. You do?

Mr. LEE. Yes, sir. In fact, the United States Geological Survey has a geologist down there this year making a preliminary reconnaissance, and our estimate was based on figures furnished by the Geological Survey.

Mr. WIRTH. In other words, it is a repaying proposition. We do quite a little of that, Mr. Chairman. If I may say, the archeological work is handled on a contract basis instead of duplicating services. We employ them to do these specialties rather than trying to employ a specialist to do it and to have one on our roll.

RIVER-BASIN STUDIES

Mr. JENSEN. You mentioned river-basin studies which you make at the request of the Corps of Engineers and the Department of Agriculture.

Mr. WIRTH. The Bureau of Reclamation and the Corps of Engineers are the people for whom we do this work. The Bureau of Reclamation is our biggest client in that field. And from Agriculture we do get some requests, but they do not do anywhere near the amount that Reclamation or the Corps of Engineers do.

Mr. JENSEN. And you submit those reports to them?

Mr. WIRTH. We make for the Corps of Engineers the reconnaissance studies to determine whether the area is suitable for recreation and the type of recreation that is available. And, of course, we work with them in making the final disposition of it. Here are some of the type of reports we give them after further studies.

HISTORICAL INVESTIGATIONS

Mr. JENSEN. You have an item of "Historical investigation" on pages 39 and 40 of the justifications.

There are items contained in that for which increases are requested under other headings. How do you explain that?

Mr. WIRTH. May I ask Mr. Lee, the Assistant Director who has that particular program under his jurisdiction, to talk on that subject?

Mr. LEE. This item provides for the small staff the Service needs to supervise all the historical work in the historical areas of the park system which now consist of over 120 areas. They have increased from 22 in 1930 to 95 in 1940, and now there are something over 100. One of the latest is the Independence Hall National Historical Park in Philadelphia. From this $68,000 the service employs a regional historian in each of our 4 regions and a staff of 3 or 4 people here in Washington to prepare or review the literature, to supervise the guide and visitor services in the parks, and furnish information to a visitation figure of something like 15 million a year who go to these areas. Among the areas, of course, are the Statue of Liberty, Lincoln Memorial, Washington Monument, and all the others of that type.

REQUESTS FOR ADDITIONAL HISTORICAL AREAS

Mr. WIRTH. I might add to that that we are receiving a great number of requests that additional historical areas be included in the park system, and we have turned down about 95 percent of them. But they all require investigation and reports back to the Service. Many of those requests come from Members of Congress. A good deal of the time of the historians is taken up in running down historical facts and making the proper reports and analyses as to whether they are of national importance or not.

REVENUE

Mr. JENSEN. What was the total revenue that you collected in fiscal years 1951 and 1952, and what is your estimate for 1953?

Mr. WIRTH. Do you have that, Mr. Tolson, or do you have that, Mr. Neilson?

Mr. TOLSON. In 1951 the revenue was $3,534,372.01; in 1952 it was $3,556,767.94. We estimate for 1953 that we will take in about $3,860,000, and in 1954 about $4,210,000.

NEED FOR INCREASE IN FEES

Mr. JENSEN. I would like to read into the record a letter to the committee from Mr. Robert E. Lee, director of surveys and investigations for the House Appropriations Committee. They made a limited study of the National Park Service recently, and they came up with some suggestions. For instance, they say:

(*a*) A study of National Park fees has been made by the National Park Service, and a recommended revision has been in the Secretary's office since last June. The Director informed us that while he believed that fees should be revised, no changes would be made before the beginning of 1955. When questioned by us as to the reason for such a long elapsed time before expecting revision, he stated that it would take that long to get the revisions approved in all channels.

Many of the park fees have never been revised. For example, in Yosemite National Park fees have not been increased since 1931. Apparently there are other circumstances of this nature.

It is estimated that at least another $1 or $2 million of revenue could properly be obtained from this source. If we refer to NP–1 of the 1954 justification report, we find a tremendous increase in park visitors but revenues from fees has not kept pace with such an increase. When we consider the substantial effect of inflation since 1933 or 1939 or even since 1945, the average fee per visitor should be at least 50 to 100 percent higher. An examination of the table on page NP–1 discloses the fact the average fee collected per visitor is actually decreasing.

(*b*) The matter of fees charged to concessionaires was examined, and it appears that the Government is not getting a fair return.

For example, the audit report of the Yosemite Park & Curry Co. as prepared by certified public accountants discloses that during the last 10 years (which includes the war years when travel to national parks was greatly restricted) this company earned, after income taxes, approximately 14 percent for the stockholders. Its gross revenues in 1952 were in excess of $6,200,000, and its net profit after income taxes and concession fees was $254,300. The Government only collected a total of $11,700 in concession fees, which seems inequitable. The indications are that this is generally true.

The new contracts are being let on a percentage-of-gross basis: one-fourth of 1 percent on the first $500,000, and one-half of 1 percent over $500,000.

(These percentages may vary somewhat with different contracts.)

One of the reasons given is that on account of audit difficulties, a percentage of net profit might even result in reducing the Government's share. Presumably the Director fears financial manipulations. It has been suggested that an outside service make a survey and make recommendations as to the proper concession fees

to be charged. We believe this would not be necessary, too costly, and would delay establishing new and more equitable fees. We believe the Government has sufficient legal and accounting talent to take care of this matter.

In our opinion, this could be handled immediately on the following basis:

(1) A more or less standard contract which provided in simple terms the nature of the expenses to be deducted and the Government's share of such net profit.

(2) Require the concessionaire to present an annual audit by certified public accountants with a certification to include that on the basis of the contract, the Government was paid its just return.

(3) A comprehensive audit by the General Accounting Office could also serve to determine that the Government was getting its stipulated share of the profits.

ROBERT E. LEE,
Director, Surveys and Investigations.
House Appropriations Committee.

CONSIDERATION OF LOW INCOME GROUPS

Mr. JENSEN. Mr. Wirth, I am sure you agree that the fees should be increased. Is that right?

Mr. WIRTH. Yes, sir.

Mr. JENSEN. This committee has always been very careful in seeing to it that the poor people who attend these parks with their families are not overcharged. We have insisted that free camping grounds be furnished to that class of people and that the best facilities we could afford for sanitation, cooking, and playgrounds be provided. We do not worry much about the man of moderate means or the well-to-do people. They can look after themselves pretty well. But we are concerned about the man and wife who come with their children into a park and spend their vacation. I am sure I speak for every member of this committee when I say we want to make it easy for those people to get into the park and make it just as nice for them as we possibly can while they are in the park.

In regard to the fees, I presume you charge so much a car.

Mr. WIRTH. Yes, sir; so much a car.

THE POSSIBILITY OF INCREASING FEES IN FISCAL 1954

Mr. JENSEN. Can you give us your reasons for not putting these increases into operation and not raising these admittance fees in fiscal 1954? You are asking an increase of $6,856,670 over last year for the National Park Service. Can you give us any reason why we should not attempt to make up a part, at least, of that difference? I am going to be frank with you when I say this committee, I am sure, is going to scrutinize your requests for all of these things, especially your increases, with an eagle eye. Can you tell us why you think you cannot increase these admittance fees beginning next July 1?

Mr. WIRTH. I would like, if I may, in my own way, to approach this question. I think I can answer this question. Let me say that I do not recall talking to Mr. Lee, but I will say I think in any case he is in error when he says that I—or perhaps I should say he misunderstood the matter when he said 1955. I have used the year 1954. Now, we had the matter up with the Secretary's Office as he said, because we have to get approval upstairs, but we have withdrawn that request for approval, because we want to revamp it again in the light of our further studies.

Mr. JENSEN. You did talk to Mr. Wise?

Mr. WIRTH. Yes, sir; Mr. Wise and Mr. Brandt, who work in the Interior Department. I do not want it to be a criticism of the Depart-

ment, but it takes a little time to get these through the Department. This might be especially true at this time if we submit new recommendations, because the Department is just getting reorganized. We have to submit it and explain it to the Assistant Secretary and get his concurrence. However, we have withdrawn the previous submission because there are other factors which have changed it.

There are two things we should do. First, you know the campgrounds for the people you are talking about are free to use once they get in the park.

Mr. JENSEN. Yes. I know that.

Mr. WIRTH. We charge a fee at the gate. Last year, if you recall, I told you we were not getting the money we should get from the gate, even with our present fee, because we were not able to man the gates. However, if we can get this budget here this year we will be able to man the gates. We would get considerable more money—about $400,000 or $500,000 more at least—if we could man our gates.

Mr. JENSEN. We are not going to be very anxious to give you more people to man your gates unless you collect more money at the gates in increased admittance fees.

Mr. WIRTH. Well, all I can say to you, sir, is that we will work to try to get that right away so it can start July 1. But I hesitate to change the fee in the middle of the season. July 1 is the middle of the season so far as we are concerned.

Mr. JENSEN. There is no reason in the world, as I see it, why you cannot get all this done in 30 days. You can make your study and your recommendations to the Secretary. And you are going to have no trouble down there. I am very sure of that.

Mr. WIRTH. Well, I can assure you we are very anxious to get started on that.

Mr. JENSEN. I do not believe you will have any trouble in getting your recommendations approved.

Mr. WIRTH. I assure you we will have our recommendation up to the Secretary within 2 weeks.

Mr. JENSEN. That is fine. Let us get this thing taken care of, as it has been going on too long now.

Mr. WIRTH. We will have our recommendation up there within 2 weeks. I would also like to point out this factor in regard to our gates—and I told Mr. Wise and Mr. Brandt this, also—that we are telling our superintendents to simplify our gate procedures. They are a little too complicated, and they vary between the parks. We are trying out a new system, and we have invested $15,000 in new machines similar to the way they handle toll roads, for a trial period at the Grand Canyon, Yellowstone, Crater Lake, and Shenandoah National Parks, which I think will simplify and permit us to do a better job and get the people in the parks and not take so much time. We are working on that to simplify it.

I will say we will certainly have our recommendation up to the Secretary in 2 weeks and try to get it in operation at the earliest possible date.

Mr. JENSEN. You will remember a few years ago an amendment was offered on the floor of the House by Congressman Fernandez, of New Mexico, for the addition of 2 elevators at Carlsbad Cavern, and I rose in support of his amendment and spoke in support of his amendment for 1 reason, and 1 reason only, and that was because the

Carlsbad Cavern was making a profit. Had they not been making a profit, I would not have been justified in supporting Mr. Fernandez' amendment. There are many improvements that need to be made in these parks.

We have all visited them. Congressman Norrell spent a considerable time a few years ago going through the parks. All members of this subcommittee have gone through the parks, and we do not feel justified in making the necessary improvements without the collection of more revenue.

Now, those are just plain, blunt words.

I am glad to hear you say you will get that recommendation to the Secretary at the earliest possible date.

Mr. WIRTH. We will do that within the next 2 weeks.

Mr. JENSEN. We do not want to charge excessive fees, of course.

Mr. WIRTH. There is one other thing which we are instituting this year, and that is a time limit in the parks. In other words, when they go into the parks we are trying out a 2-week time limit; in other words, a person should not go in there and spend the whole summer. We now have our tickets for this program, and they will have a 2-week expiration date put on them. So when a person comes back 3 weeks later, he will have to pay another fee rather than staying there the whole summer.

NEED FOR REVISED CONTRACTS WITH CONCESSIONAIRES

Mr. JENSEN. The contracts you make with these concessionaires are something that need study. I am sure you will make a study of them.

Mr. WIRTH. I feel very strongly about this, and I would like to have it on the record. I have spoken to the people in the Secretary's office about it. These operators are big business; they are not small business. We have been operating on 20-year contracts, and most of them were on a percentage of the net, and it is cumulative up to 6 percent. In other words, the Government did not get any profit until after they made a 6-percent profit on their investment. During the war they lost money, and the Yellowstone company is not paying us a red cent based on that old contract. They are still trying to make up the accumulative 6 percent. I don't blame the Yellowstone company as they are operating within their contract. The contract is up in 4 years, and since I have been Director all new contracts are on a percentage of the gross right straight through. It will save us money in auditing, and we can let the Internal Revenue Bureau worry about their profits.

I am also trying to tie into the contracts an agreement whereby they will carry out an improvement program to be agreed upon within a given number of years. The Yosemite Park & Curry Co. agreement is a $1,000,000 5-year construction program of building facilities. The operators of these parks, as a rule, have been making money. They are healthy, and we want to keep them healthy. We want private business to make a reasonable profit, but we need more facilities. We do provide water and sewers and other utilities. We must encourage the operators to spend more money in the parks for visitor housing. In one or two cases, to be perfectly frank, we had

to bail out our operators because they were not profitable, and they were going in the hole.

Mr. BUDGE. Just how do you do that, Mr. Wirth?

Mr. WIRTH. Well, they got an act of Congress—the Mount Rainier project, for instance. The Congress authorized and appropriated $310,000 for the purchase of the facilities of the Mount Rainier Co., and we negotiated the purchase for $300,000. They came in, and the Congress—Mr. Tollefson introduced the bill, and it went through Congress. Now we have the building, and we are leasing it out to an operator. The same company is operating on an extension contract, but they have been relieved of their capital investment. The point on that is that these are short-term operators and much of the money was put in by private citizens who were interested in seeing that the park visitor was taken care of. They were built at the time when people used to come there by railroad and stay at hotels.

Mr. BUDGE. I did not want to extend that inquiry at this time. I think that is sufficient.

Mr. WIRTH. May I just say one thing more on the contract situation? I believe very strongly in this, and I hope it can be done. I am going to request in our 1955 budget that we be given approval from the Department for an item to allow me to employ an outside business concern to come in and look over our entire concession problem, both the operators themselves and our contracts, in order to be sure they are treated right and the Government is treated right and the public is treated right. They are big business, and we are not really experienced in running hotels and so forth. We are interested in their development and taking care of the people, and we need certain outside help. There have been so many questions raised on this subject that I would feel much better if the Government, the concession, and the public had the protection that such a study would provide.

Mr. JENSEN. I think you are exactly right.

MAINTENANCE AND REHABILITATION OF PHYSICAL FACILITIES

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$7,448,790	$8,003,370	$9,200,000
Reimbursements from non-Federal sources	12,785	13,000	13,000
Reimbursements from other accounts	1,507,694	1,558,650	1,580,566
Total available for obligation	8,969,269	9,575,020	10,793,566
Unobligated balance, estimated savings	−25,451		
Obligations incurred	8,943,818	9,575,020	10,793,566
Comparative transfer from "Operating expenses, General Services Administration"	19,355		
Total obligations	8,963,173	9,575,020	10,793,566

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
1. Roads and trails	$3,829,826	$4,138,495	$4,600,000
2. Buildings, utilities, and other facilities	3,612,868	3,864,875	4,600,000
Total obligations from appropriated funds	7,442,694	8,003,370	9,200,000
Reimbursements from non-Federal sources:			
3. Replacement of personal property sold	12,785	13,000	13,000
Total direct obligations	7,455,479	8,016,370	9,213,000
Obligations Payable Out of Reimbursements From Other Accounts			
1. Roads and trails	52,088	88,080	88,080
2. Buildings, utilities, and other facilities	1,455,606	1,470,570	1,492,486
Total obligations payable out of reimbursements from other accounts	1,507,694	1,558,650	1,580,566
Total obligations	8,963,173	9,575,020	10,793,566

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Summary of Personal Services			
Total number of permanent positions	1,063	1,106	1,159
Full-time equivalent of all other positions	539	604	714
Average number of all employees	1,459	1,632	1,810
Average salaries and grades:			
General schedule grades:			
Average salary	$4,632	$4,679	$4,694
Average grade	GS-6.8	GS-6.8	GS-6.8
Crafts, protective, and custodial grades:			
Average salary	$3,326	$3,340	$3,351
Average grade	CPC-5.0	CPC-4.9	CPC-4.9
Ungraded positions: Average salary	$3,245	$3,370	$3,404
Personal service obligations:			
Permanent positions	$3,196,018	$3,670,253	$3,956,775
Part-time and temporary positions	1,673,082	1,879,338	2,226,175
Regular pay in excess of 52-week base	14,181	15,117	16,096
Payment above basic rates	85,533	69,840	72,265
Total personal service obligations	4,968,814	5,634,548	6,271,311
Direct Obligations			
Appropriated funds:			
01 Personal services	4,301,171	4,980,046	5,623,823
02 Travel	61,528	57,602	78,191
03 Transportation of things	41,888	44,694	51,240
04 Communication services	10,557	12,578	12,842
05 Rents and utility services	132,639	228,426	245,011
06 Printing and reproduction	3,222	5,525	6,085
07 Other contractual services	607,490	608,478	748,886
Services performed by other agencies	134,746	41,105	83,140
08 Supplies and materials	1 322,810	1,462,768	1,647,894
09 Equipment	775,376	529,395	667,039
10 Lands and structures	17,858	----------	----------
13 Refunds, awards, and indemnities	3,423	----------	----------
15 Taxes and assessments	29,986	32,753	35,849
Total obligations from appropriated funds	7,442,694	8,003,370	9,200,000
Reimbursements from non-Federal sources:			
09 Equipment	12,785	13,000	13,000
Total direct obligations	7,455,479	8,016,370	9,213,000

Obligations by objects—Continued

Object classification	1952 actual	1953 estimate	1954 estimate
Obligations Payable Out of Reimbursements From Other Accounts			
01 Personal services	$667,643	$654,502	$647,488
02 Travel	7,717	6,762	6,774
03 Transportation of things	8,119	13,808	8,183
04 Communication services	1,413	1,338	1,344
05 Rents and utility services	63,005	82,352	91,794
06 Printing and reproduction	12,216	12,500	12,500
07 Other contractual services	91,141	50,127	51,941
08 Supplies and materials	627,585	713,783	379,162
09 Equipment	16,313	19,431	17,346
10 Lands and structures	9,207		
15 Taxes and assessments	3,335	4,047	4,034
Total obligations payable out of reimbursements from other accounts	1,507,694	1,558,650	1,580,566
Total obligations	8,963,173	9,575,020	10,793,566

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$1,470,449	$1,313,892	$1,517,262
Obligations incurred during the year	8,943,818	9,575,020	10,793,566
	10,414,267	10,888,912	12,310,828
Deduct:			
Reimbursable obligations	1,520,479	1,571,650	1,593,566
Adjustment in obligations of prior years	206,134		
Unliquidated obligations, end of year	1,313,892	1,517,262	1,717,262
Total expenditures	7,373,762	7,800,000	9,000,000
Expenditures are distributed as follows:			
Out of current authorizations	5,985,086	6,550,000	7,575,000
Out of prior authorizations	1,388,676	1,250,000	1,425,000

For maintenance and rehabilitation you are asking for $9,200,000 which is an increase of $1,196,630.

ROADS AND TRAILS

Without objection, I would like to put page 50 of the justification in the record.

(The matter referred to follows:)

Roads and trails

Subactivity	Net appropriation	Decreases	Base 1954	Estimate 1954	Increases	Page reference	
						Table	Justification
(a) Primary roads	$3,223,299		$3,223,299	$3,594,490	$371,191	52	50
(b) Secondary roads	247,993		247,993	274,343	26,350	52	50
Subtotal, roads	3,471,292		3,471,292	3,868,833	397,541		
(c) Trails	667,203		667,203	731,167	63,964	52	50
Total	4,138,495		4,138,495	4,600,000	461,505		

The National Park Service road, parkways, and trail systems requiring maintenance during the 1954 fiscal year will consist of 6,493 miles of roads and parkways, and 8,057 miles of trails, or a total of 14,550 miles of roads and trails located in the 179 areas administered by the Service. This total reflects an increase of approximately 181 miles of roads and parkways and 203 miles of trails, or a total of 384 miles of roads, parkways, and trails more than the total mileage maintained in the 1953 fiscal year. As of June 30, 1951, the capital investment represented by the existing system amounted to $207,799,200. The 1954 estimate for maintenance of the system is only 2.2 percent of the capital investment.

The increasing age of the system and its progressive deterioration due to insufficient funds for the reconstruction of obsolete and inadequate highways based on modern traffic requirements and economic life, has resulted in increasing maintenance requirements to protect the present capital investment represented by the system, and to retain it in a safe condition for public travel.

AVERAGE MAINTENANCE COST PER MILE

Mr. JENSEN. Does your cost per mile of $596 for road maintenance mean actual cost to maintain those roads, or is it just the budget request divided by total mileage?

Mr. WIRTH. It is what we have to spend on it, and that is what it costs us per mile.

Mr. JENSEN. $596 average expenditure?

Mr. WIRTH. Yes; average. It may be we spend more on certain sections, if they get too bad, than others. There are others which we have to let go, but that is the average cost per mile of the roads which we have to maintain.

DURABILITY OF ROADS

Mr. JENSEN. You are not laying any 2-inch asphalt work in these parks?

Mr. WIRTH. I do not think we are. I cannot tell you exactly what the specifications are.

Mr. JENSEN. You are not doing that, especially in the northern part of the United States?

Mr. WIRTH. Our roads are relatively light in construction, because we do not have heavy traffic on those roads.

Mr. JENSEN. Where there is freezing and thawing to a great extent, like in the northern part of the United States, a 2-inch cap of asphalt soon becomes a washboard. This committee has been critical of that to some degree.

Mr. WIRTH. For instance, our Shenandoah road does not have a top coat of asphalt on it as yet. It was built back in the 1930's, and we have got to get a top on it, or we are going to lose it. On that particular road, it will be one-half inch asphalt. It will be more of a half sole, as they call it.

Mr. JENSEN. In this climate where your temperature does not fluctuate so much, that is all that is necessary, I presume.

Mr. WIRTH. That is right.

Mr. JENSEN. But in the colder climates where it ranges from 110 degrees in the shade to 30 or 40 degrees below zero, your 2-inch cap of asphalt soon becomes a washboard.

Mr. WIRTH. Yes, sir. It goes to pieces.

Mr. JENSEN. And it is a waste of money.

Mr. TOLSON. I think it should be mentioned that our contracts to build roads of any size are let by the Bureau of Public Roads, with which we have a cooperative agreement, so that their expert road men advise us as to the type of road that should be built in a particular area.

Mr. WIRTH. Not only for the building of roads but also for maintenance. They also consult with us as to the manner in which the roads should be maintained—the various types of roads.

CONSTRUCTION

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$7,220,000	$15,030,410	$17,919,000
Contract authorization (permanent definite)	1,500,000		
Prior year balance available:			
Appropriation	7,875,949	5,536,522	2,025,500
Contract authorization	2,150,000	1,500,000	
Reimbursements from non-Federal sources	7,643	8,000	8,000
Reimbursements from other accounts	52,601	50,000	50,000
Total available for obligation	18,806,193	22,124,932	20,002,500
Balance available in subsequent year:			
Appropriation	−5,536,522	−2,025,500	−1,550,000
Contract authorization	−1,500,000		
Rescission of contract authorization pursuant to Public Law 136	−1,000,000		
Obligations incurred	10,769,671	20,099,432	18,452,500

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds			
1. Parkways	$3,587,598	$10,514,759	$4,594,000
2. Roads and trails	2,164,575	5,789,102	4,710,000
3. Buildings, utilities, and other facilities	2,316,332	2,465,095	5,500,000
4. Acquisition of lands and water rights			
(a) Lands	2,631,193	1,252,654	3,565,000
(b) Water rights	9,729	19,822	25,500
Total obligations from appropriated funds	10,709,427	20,041,432	18,394,500
Reimbursements from non-Federal sources			
5. Replacement of personal property sold	7,643	8,000	8,000
Total direct obligations	10,717,070	20,049,432	18,402,500
Obligations Payable Out of Reimbursements From Other Accounts			
2. Roads and trails	21,040	20,000	20,000
3. Buildings, utilities, and other facilities	31,561	30,000	30,000
Total obligations payable out of reimbursements from other accounts	52,601	50,000	50,000
Obligations incurred	10,769,671	20,099,432	18,452,500

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Summary of Personal Services			
Total number of permanent positions	152	171	213
Full-time equivalent of all other positions	236	249	287
Average number of all employees	379	403	479
Average salaries and grades:			
General schedule grades:			
Average salary	$4,632	$4,679	$4,694
Average grade	GS-6.8	GS-6.8	GS-6.8
Crafts, protective, and custodial grades:			
Average salary	$3,326	$3,340	$3,351
Average grade	CPC-5.0	CPC-4.9	CPC-4.9
Ungraded positions: Average salary	$3,245	$3,370	$3,404
Personal service obligations:			
Permanent positions	$698,599	$769,079	$966,027
Part-time and temporary positions	762,150	805,495	926,968
Regular pay in excess of 52-week base	2,697	2,961	3,715
Payment above basic rates	10,637	11,500	13,130
Total personal service obligations	1,474,083	1,589,035	1,909,840
Appropriated funds:			
01 Personal services	1,451,894	1,564,035	1,889,840
02 Travel	76,007	75,000	90,000
03 Transportation of things	21,183	18,000	22,000
04 Communication services	7,549	7,500	8,500
05 Rents and utility services	192,705	350,000	200,000
06 Printing and reproduction	10,517	20,000	15,000
07 Other contractual services	878,954	600,000	900,000
Services performed by other agencies	1,418,728	3,265,887	813,600
08 Supplies and materials	375,008	316,010	500,000
09 Equipment	195,777	50,000	50,000
10 Lands and structures	6,069,447	13,765,000	13,893,060
13 Refunds and awards	2,331		
15 Taxes and assessments	9,327	10,000	12,500
Total obligations from appropriated funds	10,709,427	20,041,432	18,394,500
Reimbursements from non-Federal sources:			
09 Equipment	7,643	8,000	8,000
Total direct obligations	10,717,070	20,049,432	18,402,500
Obligations Payable Out of Reimbursements From Other Accounts			
01 Personal services	22,189	25,000	20,000
02 Travel	3,036	2,500	1,000
05 Rents and utility services	2,669	5,000	4,000
08 Supplies and materials	10,867	17,500	25,000
10 Lands and structures	13,840		
Total obligations payable out of reimbursements from other accounts	52,601	50,000	50,000
Obligations incurred	10,769,671	20,099,432	18,452,500

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$11,966,346	$6,197,984	$10,239,416
Obligations incurred during the year	10,769,671	20,099,432	18,452,500
	22,736,017	26,297,416	28,691,916
Deduct:			
Obligations transferred to "Construction (liquidation of contract authorization), National Park Service"	4,150,000		1,500,000
Reimbursable obligations	60,244	58,000	58,000
Unliquidated obligations, end of year	6,197,984	10,239,416	10,633,916
Total expenditures	12,327,789	16,000,000	16,500,000
Expenditures are distributed as follows:			
Out of new obligational authority	12,327,789	10,000,000	8,500,000
Out of prior authorizations		6,000,000	8,000,000

Mr. JENSEN. You are asking for an increase of $2,888,590 for construction. Will you explain that in as few words as possible?

Mr. WIRTH. Yes, sir. Most of that construction is for small items—that is, buildings and utilities—with the exception of the Teton National Park item for which we are asking around $1 million for water and sewer facilities so we can go ahead with the campground development and the cabin and lodge development, both in connection with the campgrounds, and the operation of the Jackson Lake lodge, which will involve a $4 to $5 million expenditure by the park concessioner and which he is willing and ready to go ahead.

Of course, there is the elevator shaft at Carlsbad, and the other big item in there is one-quarter of a million dollars for the Lake McDonald Hotel in Glacier National Park. That is a building that we have that is Government owned. That was purchased with the land and is now under contract with the Glacier Park Co. It is our building, and they are willing to go ahead and spend more money for additional multiple cabins to go with it, but they cannot do it until we get the hotel in shape, because as the central unit in the development it cannot take an additional load. There is no fire protection there, and we have required all of our concessionaires to put in sprinkler systems for fire protection. However, we have not done it in our own building, and we have hundreds of people coming in that building, and they are very vulnerable.

BALTIMORE-WASHINGTON PARKWAY

Mr. JENSEN. With reference to the construction program of the Baltimore-Washington Parkway I would like to have the table on page 90 placed in the record without objection.

(The matter above referred to follows:)

Authorizations, appropriations, and unappropriated balances, Baltimore-Washington Parkway

Public Law 643, 81st Cong., approved Aug. 3, 1950, authorized appropriation of		$13,000,000
Public Law 413, 82d Cong., approved June 25, 1952, increased the foregoing authorization by		1,500,000
Total authorized for appropriation		14,500,000
Less amounts appropriated:		
1951 fiscal year: Provided through release of budgetary reserves established pursuant to sec. 1214 of the General Appropriation Act, 1951	$1,500,000	
1952 fiscal year: Interior Department Appropriation Act:		
To cover prior-year contract authorization provided by the Federal Aid Highway Act of 1950	3,000,000	
For additional work	1,200,000	
1953 fiscal year: Interior Department Appropriation Act	6,750,000	
Total appropriated through 1953 fiscal year		12,450,000
Balance to be appropriated		2,050,000
Proposed by 1954 budget estimates:		
For completion of surfacing 2 projects for which funds were provided for the 1953 fiscal year (see "Construction" estimate)	$550,000	
For liquidation of contract authorization provided by the Federal Aid Highway Act of 1952 (proposed by this estimate)	1,500,000	
		2,050,000

General Administrative Expenses

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$1,254,774	$1,342,000	$1,400,000
Reimbursements from non-Federal sources	414	500	500
Reimbursements from other accounts	9,346	6,545	
Total available for obligation	1,264,534	1,349,045	1,400,500
Unobligated balance, estimated savings	−1,511		
Obligations incurred	1,263,023	1,349,045	1,400,500

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
1. Departmental expenses	$730,968	$778,765	$796,765
2. Regional office expenses	522,295	563,235	603,235
Total obligations from appropriated funds	1,253,263	1,342,000	1,400,000
Reimbursements from non-Federal sources:			
3. Replacement of personal property sold	414	500	500
Total direct obligations	1,253,677	1,342,500	1,400,500
Obligations Payable Out of Reimbursements From Other Accounts			
1. Departmental expenses	920		
2. Regional office expenses	8,426	6,545	
Total obligations payable out of reimbursements from other accounts	9,346	6,545	
Obligations incurred	1,263,023	1,349,045	1,400,500

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Summary of Personal Services			
Total number of permanent positions	240	246	252
Average number of all employees	216	229	235
Average salaries and grades:			
General schedule grades:			
Average salary	$4,632	$4,679	$4,694
Average grade	GS-6.8	GS-6.8	GS-6.8
Crafts, protective, and custodial grades:			
Average salary	$3,326	$3,340	$3,351
Average grade	CPC-5.0	CPC-4.9	CPC-4.9
Ungraded positions: Average salary	$3,245	$3,370	$3,404
Personal service obligations:			
Permanent positions	$1,108,923	$1,191,075	$1,248,305
Part-time and temporary positions		440	440
Regular pay in excess of 52-week base	4,744	4,926	5,209
Payment above basic rates	857		900
Total personal service obligations	1,114,524	1,196,441	1,254,854

Obligations by objects—Continued

Object classification	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
01 Personal services	$1,105,392	$1,189,896	$1,254,854
02 Travel	56,712	60,806	60,000
03 Transportation of things	1,441	2,038	2,308
04 Communication services	14,556	15,875	15,800
05 Rents and utility services	2,935	5,100	3,315
06 Printing and reproduction	22,022	24,140	22,290
07 Other contractual services	19,306	15,750	17,090
08 Supplies and materials	16,950	18,092	16,680
09 Equipment	13,260	9,400	6,763
13 Refunds, awards, and indemnities	250	50	50
15 Taxes and assessments	439	853	850
Total obligations from appropriated funds	1,253,263	1,342,000	1,400,000
Reimbursements from non-Federal sources:			
09 Equipment	414	500	500
Total direct obligations	1,253,677	1,342,500	1,400,500
Obligations Payable Out of Reimbursements From Other Accounts			
01 Personal services	9,132	6,545	----------
02 Travel	94	----------	----------
08 Supplies and materials	6	----------	----------
09 Equipment	114	----------	----------
Total obligations payable out of reimbursements from other accounts	9,346	6,545	----------
Obligations incurred	1,263,023	1,349,045	1,400,500

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$125,175	$64,347	$66,347
Obligations incurred during the year	1,263,023	1,349,045	1,400,500
	1,388,198	1,413,392	1,466,847
Deduct:			
Reimbursable obligations	9,760	7,045	500
Adjustment in obligations of prior years	39,439	----------	----------
Unliquidated obligations, end of year	64,347	66,347	66,347
Total expenditures	1,274,652	1,340,000	1,400,000
Expenditures are distributed as follows:			
Out of current authorizations	1,157,774	1,276,000	1,335,000
Out of prior authorizations	116,878	64,000	65,000

Mr. JENSEN. Under the heading "General administrative expenses," you are asking for an increase of $58,000, which you have explained. A position of administrative officer is requested for each region, and I would like to know how this work has been handled to date. Who has been doing it? Do you need new employees for that work?

Mr. TOLSON. We have been handling that through our chief clerk or administrative officer in each of our four regional offices, but that man is really overworked. We need a man who can specialize in budget preparation and handle field budget matters.

REGIONALIZATION

Mr. JENSEN. You possibly know I am not completely sold on the regionalization of this Nation, which, in my opinion, has been going full speed ahead for too many years. Possibly you have to have regions set up in the National Park Service, and I guess you do.

Mr. WIRTH. We only have four.

Mr. JENSEN. But is it not a fact that you also have duplications here in your main office for every officer you have in the regions?

Mr. WIRTH. I would like to say this——

Mr. JENSEN. Every person you put in the regions requires an additional man to handle that fellow's correspondence here in Washington.

Mr. WIRTH. No, sir; I would not say that, sir. All we have here in Washington—we have approximately 270 positions—all we handle here in Washington is policy, budget, personnel, and legislative matters. We do not prepare plans and we do not send people from the Washington office to make technical studies or investigations in connection with our working units in the field.

Now, it is true there is a chief naturalist and a historian here in Washington and others in the regional offices and field. Those in the regions and field make up a working unit. The policyman is here in Washington, and they do the actual fieldwork in the field. If we did not organize that way, they would all be in Washington, and we would have to send them out from here for the information, because there would be no other way of doing it. There is no duplication of work, and I defy anyone to find duplication between the Washington office and the regional offices.

In our preparation of plans and designs we have been going out close to the field so we will have a better understanding of what the problems are. Our architects and engineers go into the field and supervise work in the summertime, and in the wintertime they come together as a group and prepare our plans for the next year, and in that way they can consult with each one of them. We have one man there to handle all policy, and there is no duplication.

Mr. JENSEN. I hope you are right.

Mr. WIRTH. I would welcome any suggestion as to how we can simplify it more than we have. I do not know how we could do it.

TRANSPORTATION TO BEDLOE ISLAND

Mr. JENSEN. Referring to Bedloe Island, on which the Statue of Liberty is located, I understand you have requested that a new contract be let for the passenger service from the main dock to Bedloe Island.

Mr. WIRTH. Yes, sir.

Mr. JENSEN. That contract has not been let as yet, as I understand.

Mr. WIRTH. No, sir. We hope to have this completed before too long. However, I would like to discuss that matter off the record for a moment.

(Discussion off the record.)

Mr. JENSEN. In regard to your statement about the boats, would you care to elaborate on that?

Mr. WIRTH. We hope to have new boats on the Statue of Liberty run beginning October 1 of this year and boats better equipped and staffed with personnel who will be able to tell the public, through a mechanical-device arrangement, what the Statue of Liberty stands for and what it means and to give an explanation of the history of it and the early history of the country, and particularly the immigration story, and so forth. This matter is being discussed now with the new Department heads, and I fully expect to have that straightened out in the new contract by October 1.

Mr. FENTON. Pursuing that subject just a little further, do you have the money for these new boats?

Mr. WIRTH. That will be done under contract by the concessionaire. The boats will be owned by the concessionaire under contract with the Government, the same as they are at the present time, except there will be an improved service.

INDEPENDENCE NATIONAL PARK

Mr. FENTON. I would like to ask something about the Philadelphia project. I do not see anything in the justifications about the Philadelphia project.

Mr. WIRTH. The rest of the money for land purchase is in there.

Mr. FENTON. What is the program for the Philadelphia project?

Mr. WIRTH. I would like to say this: As long as you ask the question about the Philadelphia project, I would like to give you at least my personal idea of what we ought to do on this item that is in here at the present time.

NEED FOR SUPPLEMENTAL FUNDS

We have money in here for the rest of the acquisition in this bill now. There is $3,265,000 to buy the rest of the land rights, in accordance with the authorization which Congress gave us last year. We have made all the appraisals of the property, and we have spent all the money we had. Those appraisals now are close to a year old, and every day we wait the costs are going up. In fact, if we wait too long, we are going to have to get new appraisals; and I feel, from a business standpoint and a sound approach, if the Congress is going to appropriate this money to finish up the project, they should give it to us as soon as possible. I most sincerely hope they will do that. We are in a position where we cannot backtrack on it.

Mr. FENTON. Where in the justifications are you asking for that money?

Mr. WIRTH. Page 85, at the top of the page. I sincerely think it would be best for this money to be taken out of this bill and put in a supplemental bill and get it right away so we can go ahead before prices go up, because a month or two or three months will bring prices up. So long as we are going ahead with it, we should go ahead and do it as fast as we can.

Mr. JENSEN. I might say, Dr. Fenton, that I do not know whether we are going to have another deficiency bill or not. We are going to try to cut out these deficiency bills.

Mr. WIRTH. I think there is one which is going through now on a supplemental basis, I believe.

Mr. JENSEN. Yes. They call them supplementals now. They call them supplementals to get out from under the Antideficiency Act, which provides pretty stiff penalties for overspending. I am not saying yours falls in the category of a deficiency, because I do not believe it does.

Mr. WIRTH. No; it does not.

Mr. JENSEN. It is truly a supplemental. If you would introduce it and ask that it be taken out of the regular bill and put in a supplemental bill, that might be the most expeditious way to handle it.

We have already passed in the House one supplemental appropriation bill. I wish you had brought it up then.

Mr. WIRTH. We tried to bring it up before, sir. In fact, I have an appointment with Congressman John Saylor of Pennsylvania for tomorrow to talk over the meeting with the President on March 3 which we are going to have regarding the July 4 activities.

Mr. FENTON. Yes. I am on that committee, too.

Mr. WIRTH. I know you are on that committee—you and Congressman Hugh Scott and Congressman John Saylor.

I still think we can get this in in the Senate, and if it is felt it would go through, that is the thing to do. Furthermore, it makes this particular bill look so much bigger, but it is an item that we are committed to, and the only reason it was not in the original was that the Congress appropriated on the basis of an outside committee estimate of what it would cost and not on an actual appraisal. We were given the money based on that committee's report, and when we made our official appraisal with outside appraisers, it went up this additional amount. The court is now making a decision in the matter of proper values. We have our money in court, but we cannot make any more negotiations until we get this additional money. We are standing still, and we are making this money go as far as we can.

Mr. FENTON. You do mean to get it before the 1954 appropriations?

Mr. WIRTH. Yes. I would like to get it in the supplemental bill that is going through Congress now, and maybe we can get it in the Senate. I do not know, but I feel that is where it should be. You are going to spend it, anyway, and you save money by spending it now. I am not going back to the committee for another increased authorization in order to get more to finish up the project, but I do want to finish it up as soon as possible.

Mr. JENSEN. I think you are exactly right and for one very good reason. We know we are going to spend this money for the development and the rehabilitation and beautification of the area around Independence Hall. We know that.

Mr. WIRTH. Yes, sir.

Mr. JENSEN. We also know that generally speaking the longer a thing like that drags on the more it costs. So I think you are exactly right, and you are justified in asking that this money be supplied in the supplemental bill which is now before the Senate.

Mr. FENTON. You say the appraisals have been completed and this is all the money you need to clear it all?

Mr. WIRTH. That is correct. Another very important point that is often overlooked is the unsettled conditions that the people are experiencing because they know we are going eventually to buy their property. They are anxious to know what is going to be done, and

we cannot tell them definitely that we have the money or are going to get it. We are receiving calls constantly and are being criticized for redtape delays and other delays. This of course, is not true, but nevertheless it has been delayed but it is not due to redtape. It is a question of analysis and going ahead in a businesslike way. If we get the money now, we will eliminate a lot of adverse criticism.

Mr. JENSEN. I am going to give you the privilege of telling the Senate that so far as I am concerned I would like to see this item placed in the supplemental bill which is now before the Senate.

Mr. WIRTH. Thank you, sir. I will try my best.

Mr. FENTON. I assure you those are my sentiments.

Mr. WIRTH. I made a definite commitment to the Interior Committee last year when we came in with that bill, and to Congressman A. L. Miller, who raised the most objections to coming back for the additional authorization, although I do not know whether he voted for or against it, who is now the chairman of that committee. I made a definite commitment that I was not coming back for further authorization. He felt we could finish it up with this, and we could do it if we had it right now.

Mr. JENSEN. If you received the money now, you could do it without any further authorization?

Mr. WIRTH. That is right, as far as land acquisition is concerned.

Mr. JENSEN. And you would not need additional money?

Mr. WIRTH. That is right.

Mr. FENTON. What other money are you asking for this project for 1954?

Mr. WIRTH. Outside of our management and protection, that is all. As you probably know, the Advisory Board will be down here on Tuesday and, after meeting with the President, they are going to meet in the Secretary's conference room, and at that time we hope to have ready a tentative outline of the layout and how we are going to handle the interpretation and so forth of the whole area. Then, I understand, the entire Pennsylvania delegation is going to have lunch with Judge Lewis and the committee later.

CRIME IN OUR NATIONAL PARKS

Mr. FENTON. One of the things I have always been interested in is our national parks here in the city—the police protection and that sort of thing. How are you fixed for police protection?

SUMMARY OF MAJOR OFFENSES

Mr. GARTSIDE. Dr. Fenton, we have shown a much better record in the field of crime since this committee gave us that small increase a few years ago. However, in certain fields we are lagging. I will give you a brief summary of the situation. The major offenses in 1952 were 322, which was an increase of 15 cases over 1951. In juvenile cases we had 612, which was an increase of 244 over 1951. In auto thefts, we had 33 in 1952, which was an increase of 22 over 1951.

In recoveries, we recovered not only a number that had been stolen within the parks but also some for other jurisdictions, making a total of 28, which was an increase of 16 more recoveries than we had in the previous year. The total arrests were about the same, 12,340

in 1952 against 12,178 in 1951. I would say 80 percent of those were traffic cases. In addition, we had an increase in the petty-thievery category and holdups. There are a number of gangs working in the parks performing yoking jobs, and there was also an increase in breaking and entering the buildings within the parks.

On the whole, I would say we do not have the situation completely in hand, but I do not think that is true anywhere. We do know the actual presence of a policeman is the most powerful deterrent that we have to the commission of crime or the breaking of laws and regulations and destroying of public proterty.

We are very appreciative of the help this committee has given us.

AUTOMOBILE ACCIDENTS

I gave you a few photographs of accidents that occurred during the last calendar year, 1952, which were distributed to the members of the committee. We had 1,130 of these automobile accidents, and there were about a dozen people killed incident to the 1,130 accidents. A lot of the time of the police officers is taken up in caring for the injured and by following through, in some cases, in the equity courts as witnesses.

SPEED LIMIT

Mr. FENTON. I notice you do not have any speed-limit signs throughout the park. Would speed limits help to eliminate some of these accidents?

Mr. GARTSIDE. To give you a direct comparison, the volume peak-hour traffic in the Rock Creek and Potomac Parkway is now approximately the same as on 13th Street, which is a main highway with a speed limit, and yet the number of accidents on 13th Street greatly exceeds those in Rock Creek and Potomac Parkway which has no speed limit. We have very few accidents for that reason. Better than 50 percent of our accidents are caused by failure to give full time and attention, or driving too close to a vehicle so that you cannot keep your car under proper control.

Mr. FENTON. I use that parkway to come and go every day to and from the office, and I do not know why there are not more accidents.

Mr. GARTSIDE. We handle about 30,000 vehicles a day in Rock Creek and Potomac Parkway. In the area bounded by Constitution Avenue, Independence Avenue, 17th Street, and Arlington Memorial Bridge we are handling in excess of 100,000 vehicles a day. So, even though we had 1,100 accidents, the percentage was rather small considering the magnitude of the traffic problem.

Mr. FENTON. Do you have any speed limit at all in the park?

Mr. GARTSIDE. At certain places we have posted a speed limit. Our regulation requires compliance with a speed limit where it is posted. For instance, in the Arlington Memorial Bridge section and sections of the George Washington Parkway that are in a bad state of repair, we have imposed speed limits.

Mr. FENTON. I notice from Constitution Avenue to Massachusetts Avenue there are not any.

Mr. GARTSIDE. No, sir. We have no speed limit in that section.

Mr. WIRTH. May I say something on that? One of the causes of accidents is that when you have a sign on the side of the road it

detracts the attention of the motorist and all of a sudden he realizes there is a sign in regard to speed and he starts putting on the brakes or something, and that causes accidents by piling up those back of him.

Mr. FENTON. I understand.

Mr. WIRTH. There is that psychology to this question of not having a speed limit. In a lot of States they have taken their speed limit off and just put signs as to how fast you could go around this particular curve or that curve with safety. I do not know whether that idea has spread, but for awhile there it was quite the thing to do. Of course, where they have a speed limit up to 60 or 70 miles an hour, you would not have that down here, because you have a different problem.

Mr. FENTON. I see some automobiles going at all kinds of speeds, and I was just wondering what was a reasonable speed for that area, taking into consideration the condition of the road and the surroundings. Just how fast can a man go in that area?

Mr. GARTSIDE. Traffic conditions themselves almost govern that. For instance, if you are in a mass of traffic that is flowing in the parkway during the rush hour, you sort of keep along with the pace, and I do not believe it would average 35 miles an hour under those conditions. On the other hand, if you were using the parkway when there was little, if any, traffic during the offpeak hours, you might go ahead at a higher speed. We try to police the area from the standpoint of reckless driving—people who weave from one lane to the other and jeopardize the safety of other drivers—and it has worked out very successfully. In fact, I do not see how we could handle the volume of traffic through that congested area if we did impose and attempt to enforce a speed limit rigidly.

Mr. FENTON. I was just wondering about that. I have never heard that discussed before, but I have often been asked the question as to what is the speed limit in the park. Of course, that means without reckless driving and that means a good driver, as to how fast he can drive. I have wondered myself in coming down whether I was exceeding the speed limit when driving at 35 or 40 miles an hour.

Mr. WIRTH. I know you have noticed the design of the road itself more or less controls you. There are turns in it, and they are not banked to any extent, and most people know how fast they can go with safety. So that is one of the controlling factors on that parkway road.

POLICE PROTECTION

Mr. FENTON. What is your situation in regard to the number of policemen you have?

Mr. GARTSIDE. At the present time we have 192 policemen authorized. The District of Columbia Committee, which finances a portion of our police force, reduced the force by six positions last year. We could not see that it was justified, in view of the fact that automobile registrations are increasing and the population is increasing, and the fact that we have very good statistics that show in the park system the visitation has been increasing on an average of 5 percent per year since 1947.

There was an average increase of 5 percent per year in the use of parks and park facilities here in the Washington metropolitan area. We believe we need about 250 park policemen to do the job under the conditions that prevail today. Of course, if you increased the work by the construction of the parkway extension on the George Washington Parkway to Great Falls, the picture would change accordingly.

Mr. FENTON. Are you asking for any increases now?

Mr. GARTSIDE. The only increase we are asking for in the police force is for 1 sergeant and 10 men to police this new section of the Baltimore Parkway that will be opened up to traffic in fiscal year 1954, extending from Jessup Road, where the State police leave off, about 7 miles to the Laurel-Bowie Road.

Mr. FENTON. How about your turnover in the police force?

Mr. GARTSIDE. The statistics I gave you here show we are handling that situation very well.

MOUNTED POLICE

We have not had as many sex crimes in the park since you gave us the mounted policemen, because they can get out into sections of the park where we have heretofore had cases of exhibitionism, and that has practically been eliminated.

Mr. FENTON. That is fine. I am glad to hear that report, because I am one who does not want to economize on life and limb.

Mr. WIRTH. May I say this, too, Dr. Fenton? Besides eliminating that with those police you gave us, it also gives assurance to people going into the park that they can use it and enjoy it with that protection, and more and more people are using the park because they know they are protected.

Mr. FENTON. How many mounted police do you have?

Mr. GARTSIDE. We have ten mounted police. We would like to have 25 ultimately to cover these less frequented sections of the park where you usually find the perverts operating. I would like to point out that the most constructive uses of our police are to aid in the enjoyment of our parks and facilities. We do not measure the efficiency of police by the number of arrests and that sort of thing but rather in helping the people comply with the regulations and to enjoy the park facilities. In fact, we believe ideal policing would result in no arrests.

Mr. FENTON. How many instances of apprehended perverts have you had in the last year?

Mr. GARTSIDE. We only had 1 case of rape, and for sex offenses we had 35, and 26 perversion cases.

Mr. FENTON. What about the year before that?

Mr. GARTSIDE. I do not happen to have that figure here at the present time, but my recollection is that there has been a reduction in the overall when you consider, as I say, the exhibitionists and people who molest children, and so forth.

Mr. FENTON. Have you asked for any new mounted police?

Mr. GARTSIDE. No, sir; we have not.

Mr. WIRTH. It may have been in our original request, but within our budget limitation there are certain ceiling limitations that are imposed.

Mr. FENTON. Did you ask for any?

MOTORIZED POLICE FOR THE BALTIMORE-WASHINGTON PARKWAY

Mr. GARTSIDE. Originally we asked for an increase in the police force, but it was not included in the authorization.

Mr. WIRTH. With the bureau limitation, the best we could do was to ask for new police for the Baltimore-Washington parkway.

Mr. FENTON. How many are you asking for now?

Mr. GARTSIDE. Eleven—1 sergeant and 10 privates—with the necessary uniforms and equipment.

Mr. WIRTH. That is for the new Baltimore Parkway.

Mr. JENSEN. Those will be motorized?

Mr. WIRTH. Yes, sir. There is to be one cruiser in continuous operation.

MOUNTED METROPOLITAN POLICE

Mr. JENSEN. I have long contended since I was on the District of Columbia Subcommittee on Appropriations some 10 years ago that Washington should have mounted Metropolitan Police. In fact, I talked about it a lot. There is something about a mounted policeman that emanates a mighty lot of authority. They can get around in places where the motorcycle cannot get, and the bad people of this country respect that man on horseback with a big club in his hand. That is the reason we have mounted policemen in many of the big cities of the country. They have to be experts in their trade, and those horses have to be as smart as a man, and sometimes they say the horses are smarter.

Mr. WIRTH. I think we have some of the best horses in the country on any force.

Mr. JENSEN. Where did you get your horses, may I ask?

Mr. WIRTH. They are Morgan horses, and the original stock was donated to us by Mr. Rockefeller when he gave up the horses in Acadia, and we brought them down to Wakefield where we had the old George Washington birthplace and where we had revamped the farm, and we have trained them there and are raising them there. Our horses have come from that strain of horses which Mr. Rockefeller originally owned.

Mr. JENSEN. You train those horses down there?

Mr. WIRTH. We train them all in the park.

Mr. GARTSIDE. We have need for a few additional horses.

Mr. JENSEN. Do you have experienced horse trainers?

Mr. GARTSIDE. We have men who have had previous experience in the cavalry. We sent them up to Philadelphia and looked into their methods at Fairmont Park where they have an exceptional school for mounted police.

We also brought one of their men down on his own time to help us in setting up our training course.

Mr. JENSEN. I hope you make an exceptionally fine showing with those 10 mounted police that you have because if you do I am satisfied that sooner or later we are going to have some Metropolitan mounted police, which I hope we can get and get pretty quick. The thievery and all of this crime that goes on in this town can be handled a lot better than it is. I believe mounted police would help a lot.

Mr. WIRTH. Did you see our mounted police in the inauguration parade? They have a new felt hat, and they looked pretty snappy. They were right up in the first division, they were early in the parade, and to me they looked mighty smart.

Mr. JENSEN. Yes, they looked mighty smart, that is right.

IMPROVEMENTS DUE TO ADDITIONAL POLICEMEN

Mr. FENTON. I wish you would put in the record something that would show the improvement that has taken place in the last couple of years since we have had these additional policemen as compared with a 5-year period before that.

Mr. GARTSIDE. All right, sir. Do you want a tabulation on that? I have more or less developed it and I think it will be clear when you read the record.

Mr. FENTON. Yes, I would like to have it in table form.

(The matter referred to follows:)

Report by U. S. Park Police showing serious offenses, 1948–52

	48-hour week			40-hour week	
	1948	1949	1950	1951	1952
Nonnegligent manslaughter	4	1	1	0	0
Negligent manslaughter	1	8	0	1	1
Rape	5	4	8	8	2
Robbery	61	44	21	21	44
Aggravated assault	21	20	6	12	12
Burglary, breaking and entering	27	27	37	24	50
Larceny, $50 and over	31	20	29	24	19
Larceny, under $50	182	95	105	130	268
Auto theft	34	29	14	13	33
Sex offenses	549	340	234	73	61
Total	915	588	455	306	490
Authorized strength of force	125	125	165	[1] 198	[2] 192
Grand total of arrests for all offenses, 1948–52	9,276	8,290	10,425	12,178	12,340
Grand total of fines and forfeitures	$72,912.30	$52,499.30	$64,064.19	$72,853.90	$82,670.30

[1] 33 men added because of 40-hour week for police.
[2] Salaries of 6 positions lost due to monetary reduction in District of Columbia appropriation, fiscal year 1953.

Mr. GARTSIDE. People are not going to violate the laws and regulations if there is a policeman in view.

Mr. WIRTH. There is one other thing about our policemen which I think is of the utmost importance, and Mr. Gartside touched on it a little bit.

They are really a cross between regular city police and our park rangers. While they are called policemen, they are trained to help prevent things rather than just to make arrests. In their training each year they get training as interpreters, and our ranger-naturalists talk to them, trying to instill in them a spirit of explaining to the people and helping them to enjoy the area, just as we do with our rangers in the national-park areas.

Mr. FENTON. The reason I brought this Washington local picture into the discussion is because all of these other national-park facilities are far removed from Washington, With the testimony given here today and the traffic that we have right here in Washington, I think

that too little attention has been paid to our local problem. I for one want to see that improved.

Mr. GARTSIDE. We certainly appreciate your interest and your help, sir.

EXAMPLES OF FACILITY AND PROTECTION NEEDS

Mr. JENSEN. I suggest that you show those pictures now, Mr. Wirth.

Mr. WIRTH. No. 1. This large gathering at the Church Bowl in Yosemite Valley on a summer Sunday morning is an example of the need for facilities for religious services in the larger parks. In the parks we are expanding our facilities to take care of it. These facilities not only serve our own people but the employees of the concessionaires, and also a great number of visitors who come into the park. We try to provide these facilities and arrange them so that the various denominations use it at different hours on Sunday. We have been very successful in getting the Protestants, the Catholics, and the Jews together on this kind of thing, and they are working very well together.

No. 2. Inadequate facilities and manpower at entrance stations frequently result in delaying visitors entering the parks as illustrated by this picture of the Arch Rock entrance station at Yosemite National Park. This is in Yosemite National Park, and we should increase the number of people working on the station so that visitors can come in faster, and also so that we can collect our fees, and, as the chairman said, increase the fees.

No. 3. Heavy visitation at Statue of Liberty National Monument—approximately 17,000 visitors during the 3-day Fourth of July weekend—creates a problem of traffic control and necessitates some regimentation of visitors. Here they are coming off the boat with large crowds waiting to get back on. These [indicating] are the boats that you were talking about this morning, Mr. Chairman.

No. 4. Peaks of visitation such as Play Day at White Sands National Monument make it necessary to provide special parking and traffic controls as well as special facilities for food, water, and toilets.

In this case we have had to improvise a special type of toilet arrangement because there is no water in this part of the country, and it is expensive to bring in.

No. 5. Visitors' cars parked near the entrance to Carlsbad Caverns illustrating the need for large parking areas and controls to insure maximum utilization of parking space which is inadequate on days when more than 5,000 people visit the caverns. I think that speaks for itself.

No. 6. This picture shows approximately 1,200 visitors waiting the start of the walk-in trip through Carlsbad Caverns, a relatively small party for days of heavy visitation even though trips are started each hour.

No. 7. The Liberty Bell is the center of attention on hourly trips conducted by ranger historians at Independence National Historical Park project.

We need a great deal of protection here and rehabilitation of the floors in Independence Hall due to the tremendous crowds going through there now.

No. 8. At Badger Pass in Yosemite National Park, facilities and services are provided to accommodate skiers where now, due to lack of personnel, we have found it necessary to put a good deal of the responsibility for the protection of the people in the hands of the personnel of the concessionaire, which I might say does not relieve us of the responsibility for the health and protection of the people, and subjects us to tort claims, whether our personnel is supervising it and taking adequate precautions, or not.

No. 9. This picture of the Wawona campground in Yosemite National Park illustrates a very popular type of family-group recreation in areas of the National Park Service.

It also illustrates how they camp all over the place, and why we need additional campgrounds and sanitation facilities, and how these campgrounds start erosion and things of that sort due to the lack of proper basic facilities.

No. 10. This bridge on the Wonder Lake Road in Mount McKinley National Park is only one of the many bridges in the national parks and monuments needing regular maintenance. This bridge is an old wooden bridge, which is warped and twisted, and when you drive over it you just hope you get to the other side. We need a lot of this early wooden type of construction replaced.

No. 11. Bears damaged this trail sign in Yosemite National Park. These are subject to constant repair and replacement.

No. 12. In spite of our vigilance in public safety and protection of property there are in our parks natural hazards as illustrated by this apparently sound tree which blew down and fell across a car in a campground. In the heavily used areas of the park we have not sufficient funds to do a proper study and analysis of dangerous trees in order to remove these hazards and to reduce our liability problems to a minimum, and also for the protection of the visitors' lives.

No. 13. This "mess" on the beach of a picnic area presents us with a problem of "housekeeping." We ought to have containers, and we ought to be able to instruct people more on how to keep properties up, but with the lack of funds for these things we do have a constant job to do in picking up and cleaning up, and that takes a tremendous amount of personnel. This is a mess.

No. 14. This is a view of the interior of the tower of Independence Hall showing the need for maintenance.

We were startled to find that the tower on Independence Hall is really just tacked on to the main part of the building, as you see there. While it has stood there for many years, nevertheless it must be reappraised and put in sounder condition because it is gradually getting older and older, and it should be put in safe condition. It would be a terrible thing if the tower on Independence Hall went down sometime in a big storm.

No. 15. Where it has been necessary to construct roads in rugged terrain or on slopes subject to slides, as along the knife edge road into Mesa Verde National Park, we must face post construction and high maintenance costs.

This road, was built a number of years ago, and at that time it was said to be safe and it was felt that we had as good engineering consultants as we could get. It was done by the Bureau of Public Roads, but it is now found to be in a very bad location, and we have to move

this entire road on the other side of the mountain, and we will be in 1955 with estimates for complete reconstruction of the road.

Mr. JENSEN. Where is this road?

Mr. WIRTH. It is in Mesa Verde National Park. That is called the knife-edge road.

No. 16. Visitors to the popular evening campfire programs in our parks and monuments find it most uncomfortable to sit on decayed log benches. It is a question of money to replace them and to put them in proper shape.

Mr. JENSEN. There is no occasion at all for having such seats as that. The national parks are full of trees, and if you want to replace those benches all you have to do is go out and saw down a tree, and if not certainly we will furnish the necessary lumber. That is laziness on the part of somebody. There is no occasion for that.

Mr. WIRTH. No. 17. In areas of heavy snowfall such as Sequoia National Park we have not only the problem of snow removal to permit the flow of traffic along the roads but also snow removal from parking areas and from buildings. Snow removal is an expensive item in many areas of this size, in deep-snow areas.

No. 18. This picture bears the title "Comfort Station." It is a public toilet in Hovenweep National Monument. We have a lot of that type of "Chic Sales" in many of our parks, but it is the only thing we can do until we get the money to replace them and put in decent toilet facilities.

No. 19. In Navaho National Monument the log and canvas structure topped by a discarded oil drum filled with water serves as a public shower in the campground.

No. 20. This structure serves as a ranger station in Hovenweep National Monument. The building next to it is the ranger's home, and this is the Park Service headquarters at Hovenweep.

No. 21. For lack of storage sheds, heavy equipment is covered with snow in Grand Teton National Park. This is our equipment needed in the summertime to maintain the park, and we have no sheds to put it in. The repair required on this equipment when the snow goes off, when we get ready to operate in the springtime is terrific, and I daresay that in the period of a relatively few years the amount of money we have spent on maintenance and repair of this equipment to put it in shape for the summer would certainly pay for the cost of sheds to put it in.

No. 22. In our forested parks and monuments we must be alert to prevent and suppress forest fires. That is an ugly picture, and we hope that they never hit the parks, although they have in the past. It just illustrates one of the things that we are confronted with and that we have to fight all the time.

No. 23. A shack like this on private land inside Yosemite National Park is an eyesore. That is one of our private in-holding problems that we would like to see completely removed from the parks.

No. 24. At their evening campfire, companions remember the glories of a day that is done. I think that reflects the kind of enjoyment or glory that people get in the national parks, the type of people that we were talking about this morning, who come there and pitch their tents and enjoy the scenery in the daytime and sit around the campfire in the evening.

That is the end of those slides, Mr. Chairman.

Recommended National Park Fees

Mr. Budge. Mr. Wirth, I know that the members of this committee are just as much interested in the preservation of our natural phenomena as the members of the Park Service, but we have the problem of trying to split this tax dollar so that it goes around, and everywhere we can make savings we certainly wish to do so.

What are your recommendations as to the raising of the fees?

Mr. Wirth. The exact amounts?

Mr. Budge. Yes.

Mr. Wirth. I do not think I can give you that information now. I made a commitment this morning that we would develop them and bring them back, work them over and get them completed in 2 weeks.

Mr. Budge. What were the recommendations you filed with the Secretary?

Mr. Wirth. The recommendations that we filed with the Secretary last June did raise the fees in practically every park. I do not want to put anything in the record that I cannot substantiate and prove. However, it was an increase in fees in many places; not all, however. I could get that and incorporate it in the record.

Mr. Budge. I will ask, then, Mr. Chairman, that they be incorporated in the record.

Mr. Wirth. Our old recommendations you would like, or our new recommendations when we get them?

Mr. Budge. I am trying to see how much progress has been made since last June. What was your estimate on additional revenue in the one you filed with the Secretary?

Mr. Wirth. I think it ran about three quarters of a million.

(The material referred to follows:)

Schedule of recommended additions to and revisions to the National Park Service fee system

NATIONAL PARKS

Area	Type of fee	Present fee	Recommended fee
Acadia		None	None
Big Bend		None	None
Bryce Canyon (present fees include admission to both Bryce Canyon and Zion).	Automobile (annual)	$1.00	$1.00
	House trailer (annual)	1.00	1.00
	Motorcycle (annual)	1.00	.50
Carlsbad Caverns	Guide fee (including use of elevator), adults	1.00	1.00
Crater Lake	Automobile (annual)	1.00	1.00
	House trailer (annual)	1.00	1.00
	Motorcycle (annual)	1.00	1.00
Glacier	Automobile:		
	Trip 30 days	None	1.00
	Annual	1.00	1.50
	House trailer (annual)	1.00	1.50
	Motorcycle (annual)	1.00	.50
Grand Canyon	Automobile:		
	Trip 30 days	None	1.00
	Annual	1.00	1.50
	House trailer (annual)	1.00	1.50
	Motorcycle:		
	Trip 30 days	None	.50
	Annual	1.00	.75
Grand Teton (present fees may be applied purchase of Yellow stone permit).	Automobile (annual)	1.00	1.00
	House trailer (annual)	None	1.00
	Motorcycle (annual)	.50	1.00
Great Smoky Mountains (spur road to Clingman's Dome).	Automobile (annual)	None	None
	Motorcycle (annual)	None	None

Schedule of recommended additions to and revisions to the National Park Service fee system—Continued

NATIONAL PARKS—Continued

Area	Type of fee	Present fee	Recommended fee
Hawaii	Rest house (adult)	$0.50	$0.50
Lassen Volcanic	Automobile (annual)	1.00	1.00
	House trailer (annual)	1.00	1.00
	Motorcycle (annual)	1.00	1.00
Mammoth Cave:			
No. 1 Echo River	Guide (adult)	1.00	1.00
No. 2 Grozen Niagara	do	1.00	1.00
No. 3 Historical	do	1.00	1.00
No. 4 All Day	do	2.00	2.00
	Commercial passenger vehicle:		
	Annual permit for each passenger seat	2.50	2.50
	Quarterly permit for each passenger seat	.65	.65
	1-day permit	1.00	1.00
Mesa Verde	Automobile (annual)	1.00	[1] 1.50
	House trailer (annual)	1.00	1.00
	Motorcycle (annual)	1.00	1.00
Mount Rainier	Automobile (annual)	1.00	1.00
	House trailer (annual)	1.00	1.00
	Motorcycle (annual)	1.00	.50
Platt	Automobile (annual)	None	.50
	House trailer (annual)	None	.50
	Motorcycle (annual)	None	.50
Rocky Mountain	Automobile:		
	Trip, 30 days	None	1.00
	Annual	1.00	[2] 2.00
	House trailer (annual)	1.00	1.00
	Motorcycle:		
	Trip, 30 days	None	.50
	Annual	1.00	1.00
	Trucking fee Trail Ridge Road (limited to residents of Larimer, Boulder, and Grand Counties, Colo., when loads originate and terminate within those counties).		
Rocky Mountain	Vehicle, 1 ton or less, per trip	2.00	2.00
	Vehicle over 1 but not more than 2 tons, per trip.	3.00	3.00
	Vehicle, over 2 but not more than 3 tons, per trip.	4.00	4.00
	Vehicle, over 3 tons, but not more than 5 tons, per trip.	5.00	5.00
	Vehicles, over 5 tons but not more than 10 tons, per trip.	10.00	10.00
Sequoia-Kings Canyon	Automobile:		
	Trip, 30 days	None	1.00
	Annual	1.00	2.00
	House trailer (annual)	1.00	1.00
	Motorcycle (trip 30 days)	None	.50
	Motorcycle (annual)	1.00	1.00
	Guide fee (Crystal Cave)	.42	.42
Shenandoah	Automobile:		
	Single trip	.25	.25
	Annual	1.00	1.00
	House trailer:		
	Single trip	.25	.25
	Annual	1.00	1.00
	Motorcycle:		
	Single trip	.25	.25
	Annual	1.00	1.00
	Commercial sightseeing buses, single trip (fee is in addition to usual automobile permit fee).	5.00	5.00
Wind Cave	Guide fee (adult)	.50	.50
Yellowstone and Grand Teton	Automobile:		
	Trip, 30 days	None	3.00
	Annual	3.00	4.00
	House trailer (annual)	1.00	1.00
	Motorcycle (annual)	1.00	1.00
Yellowstone only	Truck fee emergency round trip between any 2 entrances (trip).	10.00	10.00
	Truck fee between north and northeast entrance ¾ to 1½ ton (annual).	20.00	20.00
	Over 1½ tons (annual)	40.00	40.00
Yosemite	Automobile:		
	Trip, 30 days	None	2.00
	Annual	2.00	[3] 3.00
	House trailer (annual)	1.00	1.00

See footnotes at end of table, p. 235.

Schedule of recommended additions to and revisions to the National Park Service fee system—Continued

NATIONAL PARKS—Continued

Area	Type of fee	Present fee	Recommended fee
Yosemite	Motorcycle:		
	Trip 30 days	None	$0.75
	Annual	$1.00	1.00
Zion (present fees include admission to both Bryce Canyon and Zion).	Automobile (annual)	1.00	1.00
	House trailer (annual)	1.00	1.00
	Motorcycle (annual)	1.00	.50

AREAS OTHER THAN NATIONAL PARKS

Adams Mansion	Admission	$0.25	$0.21
Andrew Johnson	Admission (tailor shop and home)	None	.21
Appomattox Courthouse (McLean's House).	Admission	None	.21
Aztec Ruins	Guide:		
	Trip	.25	.21
	Annual	.50	.42
Bandelier	Automobile (annual)	.50	.50
	House trailer (annual)	.50	.50
	Motorcycle (annual)	.50	.50
Blue Ridge Parkway	Automobile:		
	Trip	.25	(4)
	Annual	1.00	(4)
	House trailer:		
	Trip	.25	(4)
	Annual	1.00	(4)
	Motorcycle:		
	Trip	.25	(4)
	Annual	1.00	(4)
Casa Grande	Guide:		
	Trip	.25	.21
	Annual	.50	.42
Castillo de San Marcos	Admission	.08	.21
Chaco Canyon	Guide:		
	Trip	.25	None
	Annual	.50	None
Chickamauga-Chattanooga	Admission (Point Park)	.08	.21
Colonial—Jamestown Island	Admission:		
	NPS portion	.08	.08
	APVA portion	.25	.25
Moore House	Admission	.08	.21
Yorktown Museum	do	.08	None
Colonial historical tour	Guide (buildings and areas)	None	.25
Colonial-Yorktown, beach parking fee.	Automobile	None	.25
	Truck or bus, over ½-ton capacity	None	.50
Colonial	Commercial passenger vehicles annual permit for each passenger seat.	2.50	2.50
	Quarterly permit for each passenger seat	.65	.65
	1-day permit, each vehicle	1.00	1.00
Colorado	Automobile (annual)	.50	.50
	House trailer (annual)	None	.50
	Motorcycle (annual)	.50	.25
Craters of the Moon	Automobile (annual)	.50	.50
	House trailer (annual)	.50	.50
	Motorcycle (annual)	.50	.25
Devils Tower	Automobile (annual)	.50	.50
	House trailer (annual)	.50	.50
	Motorcycle (annual)	.50	.25
El Morro	Guide:		
	Trip	.25	.21
	Annual	.50	.42
Fort McHenry	Admission	.08	.21
Fort Pulaski	do	.08	.21
Fort Raleigh	do	.08	.21
Fredericksburg-Spotsylvania	Admission (museum)	.08	.21
George Washington's Birthplace	Admission	None	.21
Gettysburg (Cyclorama)	Admission (adult)	.25	.21
Guilford Courthouse	Admission	None	.21
Home of F. D. Roosevelt	do	.21	.21
Hopewell Village	Admission (buildings within village site)	None	.21
Jewel Cave	Guide (trip)	.50	.21
Kennesaw Mountain	Admission	None	None
	Guide:		
	Trip	.25	[5] None
	Annual	1.00	[5] None
Kings Mountain	Admission (museum)	None	.21

See footnotes at end of table, p. 235.

Schedule of recommended additions to and revisions to the National Park Service fee system—Continued

AREAS OTHER THAN NATIONAL PARKS—Continued

Area	Type of fee	Present fee	Recommended fee
Lake Mead recreation area	Permit for rowboat or canoe not motor-powered or equipped with sails.	$1.00	$1.00
	Permit for motorboat or sailboat with overall length of 15 feet or less.	2.00	2.00
	Over 15 feet but not more than 20 feet	1.00	1.00
	Over 20 feet but not more than 25 feet	4.00	4.00
	Over 25 feet	5.00	5.00
Lava beds	Automobile (annual)	.50	.50
	Motorcycle (annual)	.50	.25
Lehman Caves	Guide (trip)	.42	.42
Manassas	Admission (museum)	None	.21
Montzuma Castle	Guide:		
	Trip	.25	.21
	Annual	.50	.42
Morristown	Admission (museum and mansion)	.08	.21
Muir Woods	Admission	None	.21
National Capital Parks:			
House Where Lincoln Died	Admission	.08	.08
Lee Mansion	do	.08	.08
Lincoln Museum	do	.08	.08
Washington Monument	Elevator	.10	.10
Ocmulgee	Admission (museum)	None	[6] .21
Perry's Victory	Elevator:		
	Adult individuals	.25	.25
	Adult groups	.10	.10
Petersburg	Admission	None	.21
Petrified Forest	Automobile (annual)	.50	.50
	Motorcycle (annual)	.50	.25
Pinnacles	Automobile (annual)	.50	.50
	House trailer (annual)	.50	.50
	Motorcycle (annual)	.50	.25
Salem Maritime	Admission	.25	.21
	Wharfage fees, each craft with overall length 15 feet but not more than 25 feet:		
	Per week	1.00	1.00
	Per month	2.50	2.50
	Over 25 feet but not more than 50 feet:		
	Per week	1.50	1.50
	Per month	3.75	3.75
	Over 50 feet:		
	Per week	2.00	2.00
	Per month	5.00	5.00
Scotts Bluff	Automobile:		
	Trip	None	.25
	Annual	.25	.50
	House trailer (annual)	None	None
	Motorcycle (annual)	.25	.25
Shiloh	Admission (museum)	None	.21
Statue of Liberty	Elevator	.05	.05
Timpanogos Cave	Guide (trip, adult)	.50	.42
Tonto	Guide	None	.21
Tumacacori	Guide:		
	Trip	.25	.21
	Annual	.50	.42
Tuzigoot	Guide	None	.21
Vanderbilt Mansion	Admission	.25	.21
Vicksburg Museum	do	None	.21
White Sands	Automobile (annual)	.50	.50
	House trailer (annual)	.50	.50
	Motorcycle (annual)	.50	.25

[1] Annual fee increased to $1.50 because of large amount of personal guide service required for each visitor.
[2] Annual fee of $2 proposed because of large volume of repeat use.
[3] Annual fee of $3 proposed because of large volume of repeat use.
[4] Collection of fees suspended until completion of parkway.
[5] Guide service is not now furnished and none will be until road is constructed to top of mountain. Fees should be rescinded until such times as public services or facilities are provided.
[6] Fee will become effective upon completion of museum.

Mr. NEILSON. The personnel that we are asking to be increased is not for this particular purpose, but with the expenditure of around $200,000 on this personnel, even with the present rates, we can pick up between $400,000 and $500,000 additional revenue by collecting fees at the gate.

Mr. BUDGE. But, in reverse if you collected more per automobile with the same personnel that you now have you could substantially increase the rates.

Mr. NEILSON. Yes, sir.

PARK FEES THE SAME AS IN 1939

Mr. BUDGE. Why have not the admission fees, for example, been raised in some of the national parks since 1931?

Mr. NEILSON. In 1939 the Park Service undertook a complete survey of the fee structure and instituted many new fees at that time, including the raising of others. That was the last time a major revision was made. That was made in 1939.

Mr. BUDGE. All right, we come up then 5 years later to 1944, and your Service was receiving at that time about $5 million in appropriations, and this year you want $30 million, which is six times as much, and yet you have not seen fit to look at this fee schedule since 1939; $30 million is your operational amount, is it not?

Mr. WIRTH. I am not trying to avoid answering your question, Congressman Budge, but Mr. Tolson, and Mr. Neilson have been handling our budget work for some time, and I think they can answer that question better than I can.

Mr. BUDGE. You have had an increase of between 4 and 5 times as much for your operation in the last 10 years.

Mr. WIRTH. Yes, sir; and I do want to point out these charts to show what we are doing with the same amount of money, so far as manpower is concerned.

Mr. BUDGE. But you have not reexamined your fee schedule here since 1939.

Mr. WIRTH. That is not correct. Maybe I should not contradict, we have reexamined it, and have submitted a correction, but it has not been put into effect.

Mr. BUDGE. You have not done anything, as I understood the gentleman at the end of the table who said your last reexamination was in 1939, until the one you filed with the Secretary's office this last year?

Mr. WIRTH. That is right. There was a war in between there, of course, where nothing was done on fee schedules then at all. Of course, our travel at that time went a way on down, but since 1946, which has been 5 or 6 years now it has been going up.

EXCESSIVE CONCESSIONAIRE PROFITS

Mr. BUDGE. How would you justify the fact that your concessionaires, at least a good many of them, have been making up to 14 percent after paying income taxes, on an average during the last 10 years, when you say business went clear down?

Mr. WIRTH. Mr. Budge, I do not want to contradict the figures given to you by Mr. Lee, except that I have here the same report

which I gave one of the investigators yesterday when he called on me, and I cannot see where there is anything like 14 percent. That is the report that they put out, and this is the same thing that Mr. Lee must have had. I would like to look into that 14-percent business myself. Our arrangement with the concessioners, up until this last year when we signed a contract in January with the Yosemite Park Curry Co., which is now on a percentage of the gross, was a percentage of the net. After these companies earned 6 percent we were to share in the amount over that. That 6 percent was a gamble at that time. All the other companies lost heavily during the war.

Mr. BUDGE. That is not borne out by the letter which the chairman placed in the record this morning that this particular company you just mentioned has, in the last 10 years, which includes the war years, averaged 14 percent of dividends for its stockholders after the payment of income tax.

Mr. WIRTH. It says here in the report to the stockholders which I gave the investigators:

> The net profit of your company for the past fiscal year after provision for taxes was $254,283 as against $209,438 for the preceding year. This year's profit figure represents 7.1 percent of the net worth and 4.1 percent of the gross revenue.

They have a total investment here of several million dollars, and that is the earnings on that.

I will have to look into that further before I can give you any other answer than that because I am not prepared for it at this time.

Mr. BUDGE. The figure which was contained in the letter which the chairman put in the record gives 14 percent over a 10-year period, average, and that is after income taxes, and also after deducting their concession fees.

Mr. WIRTH. Yes.

Mr. BUDGE. They did $6,200,000 worth of business in 1952, and they paid the Government $11,700 in concession fees. I think that is a grossly inequitable rate on its face.

What I am getting at is this, that there are two ways in which you can assist this committee and the Congress to put the parks on a more nearly paying basis, so that we can do the improving that we want to do. I have taken this matter of concessionaires up with you over the past 2 years on several occasions, and I have never been able to understand why you have not revamped that whole system. I hope that your agency is looking into it now.

Mr. WIRTH. We are, sir, and as I told the chairman this morning I want some help from the outside on that, and I will ask for it next year.

CONTRACTS WITH CONCESSIONAIRES

You must remember that these contracts have been in existence for 20 years, and there is no way in which we can break those contracts or change them. We have to live with those contracts.

It may be that 20 years from now somebody will find fault with the contract I am making today, due to changed conditions, I do not know, but what I am trying to get at here is contracts with a reasonable percentage of the gross, and also a construction program developed in order to put in more facilities to take care of the people. The gross revenue, as that report in this book you referred to shows, was $6,201,183 for 1952.

Mr. BUDGE. And on that amount of business they paid the Park Service $11,700.

Mr. WIRTH. That is right; that is correct, because I am sure that is what is in this report here. I will be perfectly frank with you and say that I did not come up here with sufficient information to answer the more or less detailed questions you are asking about the $11,700.

Mr. BUDGE. If your statements are true, and I know they are true as to the drop in business during the war years, if over a 10-year period they have been making a net of 14 percent after the payment of income taxes and concession fees their profits during the last 5 years must really have been unconscionable.

Mr. WIRTH. During the war that amount included in that 14 percent the rental——

Mr. BUDGE. I am talking about 14 percent.

Mr. WIRTH. Yes, sir; 14 percent. During the war their main facility in Yosemite was rented to the Navy, I believe, for convalescents. What they got for it I do not know offhand. We have it on record. Of course, the Navy then took over the operation and, of course, their expenditure on the building was practically nil, and the Navy had to put it back in the shape it was before they took it over. That may have been a credit toward a profit there, which it perhaps would be, and with perhaps no expense on their part at all for the hotel there. There is nothing at all that we are trying to hide on these things.

Mr. BUDGE. As you know, I have discussed this subject with you several times before and, apparently, we are just where we were 2 years ago. I would like to see some action taken here that will increase the revenue in the contracts to the point where we can take care of some of these situations that should be taken care of.

Mr. WIRTH. Yes.

Mr. BUDGE. I think your policy both as to concessionaires and your admission fees should be very carefully checked over, and that you most certainly should do something about them before your next heavy season begins, particularly on the admissions.

OUTSIDE HELP NEEDED FOR THE CONCESSION PROBLEM

Mr. WIRTH. I do not mind saying to the committee that the concession problem, this particular item you are bringing up, is the one thing that is giving me concern in handling the job that I am handling. I think that I know park work, and I think I know our park problems, and I think I know how to handle people. The concession problem is a big problem. It is big business, and as I told you this morning I would like to get outside help on it, and rather than waiting for the 1955 fiscal year budget I would like to do it right away. It would be most welcome, but I am not asking for it now, I am going to try to get it in 1955. I want and need outside help on it.

I do not mind saying that the concessioners feel that they are losing money, they say that they are not making money, that they cannot make any of these improvements, because their profits are not sufficient to warrant it, and they cannot borrow money on them, that they cannot go ahead and put in new improvements, and they are complaining about it, about the auditing and the checking of their books to see that the Government is getting the money due it.

On the other hand we come in here and get the other side, saying that the concessioners are doing too well. It is a difficult problem, and gentlemen, I need outside help in handling this problem.

Mr. BUDGE. You should be able to tell that from your own records.

Mr. WIRTH. We have their records and we audit them, and we adjust them, and we try to keep the rates to the public down within reason.

DIFFICULTY OF GETTING NEW CONCESSIONAIRE FACILITIES

Our general policy, as far as concessions are concerned all through the years, and I think it is a sound policy, has been that we rely on the concessioners to handle the commercial part of serving the public and insist on them to spend their money in putting in new facilities and allow them a reasonable profit, and at the same time keep the rates down within reach of the people.

Mr. BUDGE. I think that is a very good statement, and if that is what is being done we do not have any quarrel with it, but I think this is what is happening, most of your facilities in the parks, except the newly acquired ones, were built many, many years ago.

Mr. WIRTH. Yes.

Mr. BUDGE. They have continued to deteriorate and deteriorate to the point where they will all have to be replaced. The concessioners, in most of the parks I have visited have made little or no investment in even what would be a reasonable landlordship. They are just letting them run down, and if these profits which have been given to us are correct, then the end result is that the people are being robbed and the facilities are fast vanishing.

Mr. WIRTH. I do not think you can take an isolated case, sir, and I will say this that the only large operations, as I recall that are in really good shape are the Yosemite Park & Curry Co., the Yellowstone Park Co., and the Harvey Operations on the south rim of the Grand Canyon. The others are in difficulties, for instance, the contract of the Glacier National Park Co., which is a subsidiary of the Great Northern is up for renewal. They have two big hotels there which Jim Hill built away back.

Mr. BUDGE. Yes, I have been in both of them.

Mr. WIRTH. Yes.

I want more improvements of the cabin type of thing that the motorists use. I had been negotiating with them personally for 3 or 4 months when we started last year on an extension contract. We feel that they should agree to put in more cabins to take care of the public before they get a new long-term contract.

I thought I was doing all right, but I got a letter the other day from them criticizing us and accusing us of discouraging people to travel by railroad and promoting them to go by automobile because I turned down their request to spend $300,000 on the rearrangement of the inside of those big hotels and to do some redecoration, but not to increase a single pillow for the type of people who are coming into the Park now by car. I have refused to approve that development, telling them that I will not approve of that work unless they put at least an equal amount into cabins for the people coming in by automobile, and the reply from the president of the railroad was that they do not want

their contract renewed. They will operate in 1953 and look toward the disposal of the property rather than enter into a new contract.

Those are the things that you are up against. It is not a simple problem.

We are having a problem with the Yosemite Park & Curry Co. to get under way a million dollar improvement program which was agreed to in the new contract. We also have in our new contracts a renegotiation factor on fees every 5 years, not allowing the same fee to run through 20 years. The fee in each contract now is renegotiable every 5 years, and it is on the percentage of the gross. We also carry a construction and improvement program along with it.

We started that last year, but we have got to live with our old contracts that we have. You would not want us to tear them up.

We are criticized for putting too many auditors out to check on them. We were away behind in our audits a couple of years ago, and you gave us $100,000 to catch up on the auditing, and we are still trying to catch up on it. Some of the audits are 4 or 5 years behind, and that is bad business. Up at the Statue of Liberty we figure that the operator up there owes us at least $67,000 because we were not able to keep our audits up at the time.

Mr. BUDGE. You are, apparently, working on these two problems.

Mr. WIRTH. We are working on them very hard, and I am sorry I cannot show results overnight.

Mr. BUDGE. This committee has been in the past, and I am sure will in the future, be somewhat sympathetic toward doing everything it can to keep the parks in good shape. With your appropriations increasing so much, if you can help us by increasing the revenues, it would certainly be appreciated by the membership of the committee, I know.

Mr. WIRTH. Believe me, I certainly greatly appreciate what the committee has done for us and its attitude toward our problems, and so forth. They have been excellent, and we appreciate it very much. We will work hard with you and try to correct these things as fast as we can.

GENERAL ADMINISTRATIVE EXPENSES

PRINTING AND REPRODUCTION

Mr. BUDGE. As the Chairman stated this morning one of the most important things that we should do in maintaining for future generations these natural wonders of nature that we have, is in the field of soil and moisture conservation.

I notice that this year you are requesting $100,000 for that purpose. I think you stated this morning that at least $200,000 a year would be necessary on a long-range program. On the other hand, I have added up your estimates for printing and reproduction, and they amount to $197,549, twice as much as you are spending for soil and moisture conservation. How would you justify that?

Mr. WIRTH. You say you added up $197,549, for publications?

Mr. BUDGE. As I went through your obligations by objects and very quickly through your different functions I came up with a figure of $197,549 for printing and reproduction.

Mr. WIRTH. Well, I think you have our general administrative funds for stationery and maps and things like that added to and in connection with our publications for distribution in the parks. That is the only answer I can give you on that.

Mr. NEILSON. I am sure that is correct, but also all of the national road signs and directional signs are classed as printing and go in that object classification.

Printing and binding is broken down into two main items, $120,000 for informational printing and which covers our pamphlets and memoranda, and so forth given to visitors as they go into the parks. For instance at Yellowstone when they pay their $3 fee they get a simple pamphlet containing a simple map and other directions for use in the park.

MAPS AND PAMPHLETS

Mr. BUDGE. What I am attempting to reach is this: last week I received from the National Park Service a very beautiful pamphlet. It is an excellent job, containing color photographs.

Mr. WIRTH. On Manassas?

Mr. BUDGE. No; this was on one of the western parks, and it has very elaborate charts and photographs in it showing how many people from each State attended the park last year.

Mr. WIRTH. That is not our printing job.

Mr. BUDGE. From where did that come?

Mr. WIRTH. That was done by the States. That is done by the State Highway Department of the State on the number of people coming into the park, and so forth.

Mr. BUDGE. Yes.

Mr. WIRTH. That is done by the States. There is 1 by Montana, 1 by Wyoming, and on the Great Smokies. These are studies we wrangled out of the States to see what these parks mean to them from a tourist trade standpoint.

Mr. BUDGE. I will have to check that. It came under your signature.

Mr. WIRTH. Yes, I thought you would be interested to know about it, but we did not pay for that.

NOTE.—The following information regarding the specific pamphlet referred was later obtained for information of the committee:

This was a planning survey (Federal aid) project. Project approved July 5, 1951, by Bureau of Public Roads.

Total cost was $3,265.36; Federal participation, 57.03 percent, or $1,862.23—5,000 copies printed.

Through cooperation of the Great Northern Railway, plates for all color reproductions were furnished gratis.

The National Park Service also cooperated by furnishing some of the personnel for the traffic count.

Mr. BUDGE. I am happy to know that.

Mr. WIRTH. We have no colored print jobs at all. These are samples of our publications [indicating]. Those are the principal ones given out, and these [indicating] are sale publications. The Government Printing Office sells them.

Mr. BUDGE. Of course, I am familiar with the type of publication that you distribute at the park entrance. And that is really a worthwhile expenditure.

Mr. WIRTH. That is the only kind that we distribute, and these are sale publications. Our people do them and the Government Printing Office sells them, and we sell them in the parks. This [indicating] is the latest one on Manassas or Bull Run. I do not think that it is elaborate. That tells the story of the Battle of Manassas, and that is for sale. As far as I know it pays its way, or the Government Printing Office would not do it, at least I imagine that would be the case. They set a price on it.

Mr. BUDGE. Of course, that does not necessarily follow.

Mr. LEE. About 40,000 of those publications were sold last year. We print about two of them a year. There are 2 more provided for on historical subjects, and 1 on natural history for 1954.

Mr. BUDGE. There are a lot of man-hours in your agency that go into the preparation of all these things.

Mr. WIRTH. That is right. We have one small Information Division, and we take this technical material which is taken out of reports on the areas and interpretative work and put it in this kind of a pamphlet, and the Government Printing Office publishes it. As Mr. Lee says there are two of those published a year.

I will say this, and I am sure if we kept a record of it we could prove it, that much of this type of work that you are seeing here is done by our own technicians, working on their off hours a good part of the time without pay, getting this material out. I think we have 20 to 40 men contributing to it this way. They like to work on this kind of material and they are doing research work continually. That is not the type of thing that you can pick up and drop when the whistle blows

NUMBER OF PUBLICATIONS

Mr. BUDGE. How many separate publications do you publish each year, and how many did you publish in 1952?

Mr. LEE. In the 1952 calendar year, or the 1953 fiscal year we have published or programed 94 publications for the 180 areas in the National Park System. For the 1954 fiscal year we have booklets of the kind Congressman Fenton has in his hand at this moment for 11 areas; and simple folders like this one for 12 areas; and 84 of this small type of folder; we have maps of this sample kind for three areas; and we will republish a small number of copies of this general information table for administrative use for 1954.

Mr. WIRTH. We published them in sufficient quantity to last several years in these areas. This was published back in 1951 and is still in use.

Mr. BUDGE. I notice in 1953—and you substantially increase it for 1954—you published 6,100,000 copies. Now, of course, we cannot compute the man-hours of work that go into the preparation of those, but the total cost you gave us amounts to more than you spent for soil conservation. That is what I am getting at—which is more necessary.

Mr. WIRTH. Gentlemen, when these people come to the parks, we have to have some way of telling them what is in there and what they will find there. Each time they are reprinted we use the same material.

Mr. BUDGE. I understand that, but your item for publications is more than your soil-conservation item.

Mr. WIRTH. I do not think you can compare them—well, you can if you wish—but I do not think it is a comparison which you can make based on the kind of service rendered. We have had 42 million people coming into the parks, and there will be 46 million this year, and in a lot of areas we will use only the pamphlets. We do not print all the pamphlets that are being used. We have what we call a Natural History Association which we have formed with our own personnel and interested citizens in a lot of the Southwest areas where they print these things.

They are self-guided tours, and we put them in there and they are free; and, if you take them home with you, you put a dime in the box.

Mr. BUDGE. As a matter of fact, every local chamber of commerce puts them out, too, and they are available in the area.

Mr. WIRTH. Well, I do not know too much about that. I do not know where the chamber of commerce handles these matters.

AVERAGE CLASSIFICATION GRADES

Mr. BUDGE. Yesterday we had an agency in here that employs a very large percentage of scientific and professional personnel. Their overall average grade classification was 6.5, and yours is 6.8. How do you explain that?

Mr. WIRTH. I felt we were getting a very favorable figure on that and that you were going to compliment us.

Mr. BUDGE. Take a look at your figures in the justification.

Mr. TOLSON. 6.8 is correct.

Mr. BUDGE. And theirs is 6.5.

Mr. WIRTH. The only way I can explain that is, perhaps, in our own agency we employ in accordance with the size of the organization and, certainly on the permanent staff, an equal number of professional people to that of the Geological Survey. We have our biologists and geologists, historians and archeologists, landscape architects and engineers, and the interpretive personnel are all professional people, and also, we have a lot of areas to administer which require high grades. The man in charge is a superintendent and is in a grade in many of the larger areas of a GS–13 and GS–14. We have only one GS–15. These bring our average way up.

Mr. BUDGE. I was just trying to bring that to your attention. I checked it also, and you have a lot of people who are very similar to the personnel employed by the Forest Service, and I notice their average grade classification is 6.6, which is substantially below yours.

Mr. WIRTH. I do think we perhaps do hire more in the various fields of technicians than they do.

Mr. BUDGE. In the Fish and Wildlife Service the average is 6.4, which is considerably below you.

Mr. BUDGE. I just wanted to call that to your attention. Maybe you can make some adjustment there.

Mr. WIRTH. I will say this: As far as our personnel are concerned, they go through the same process as all of the other bureaus and are in accordance with the Classification Act. They are paid the salary in accordance to the job classification approved by the Civil Service Commission. We are under the same program and rules and regulations as the other bureaus.

Mr. BUDGE. Of course, they make their classifications in conformity, to quite an extent, to your recommendations.

Mr. WIRTH. That is correct. However, classifications are handled by the Department, which has a classification officer, and they review it, and the Civil Service Commission has their classification officer, and they review it. As a matter of fact, I do not mind saying we feel some of our personnel are underpaid, but we cannot get the classifications up because they do not meet the classifications requirements in accordance with their interpretation, which is why so many of our people are undergraded. Our regional directors are GS–14's, and many of the bureaus have GS–15's for their regional directors.

Mr. BUDGE. Of course there is a lot of variation in that. I know the committee wants to do everything it can to keep this organization going and to protect these things, but we want the help from your agency in bolstering the income and cutting down the output.

Mr. WIRTH. I do say—and I am sure you feel this way—if the job is worth so much money, that is what the man should get paid. We should not try to get them down to the point of the cheapest price which we can get out of them.

Mr. BUDGE. I agree with you there.

Mr. WIRTH. I think he ought to get the salary the job carries. Whether we are classified right is another question, but we go through the same process that every bureau does and have to comply with the Civil Service Classification Act.

CONSTRUCTION

ACQUISITION OF LAND AND WATER RIGHTS

Mr. BUDGE. I notice the total area has increased quite a lot. Would you explain to this committee just how you handle the acquisition of new land for which you do not pay, as set forth in the budget here. Of course, some of it has been by donation, but what I am particularly getting at is the trade of land.

Mr. WIRTH. Exchange of land.

Mr. BUDGE. I understand you trade timber, too. Do you not?

TIMBER LAND TRADED

Mr. WIRTH. There are only two places where we have traded any timber for land. In the Olympic National Park we traded fallen-down timber due to wind damage and also timber to be cut for our road right-of-way. As an economy measure we have taken that timber and traded it for private land in the park. We have authority to do that at Yosemite, Olympic, and Glacier. At Glacier we are in the process of trading out with BLM and getting approximately 10,000 acres of State land or the equivalent in value of 10,000 acres, I should say, because the land we are getting from the State has virgin forest on it.

FEDERAL LANDS ACQUIRED BY EXCHANGE

Mr. BUDGE. I wonder if I could request that you furnish the committee with a statement as to the land acquisitions that you have made other than those that appear in the budget.

Mr. WIRTH. Yes, sir. In fact, I might have it right here now.

Mr. BUDGE. I do not want to prolong this discussion. You can just furnish that for the record, if you will.

Mr. WIRTH. All right, sir. I will be very glad to. You want both lands purchased with donated funds and also lands we have exchanged out for timber?

Mr. BUDGE. The only one I am interested in is the second category you mentioned there.

Mr. WIRTH. The exchanged land?

Mr. BUDGE. Yes, sir.

Mr. WIRTH. Both for timber or land?

Mr. BUDGE. That is right.

Mr. WIRTH. For this last year?

Mr. BUDGE. Well, let us take that back for about the last 5 years.

Mr. WIRTH. All right, sir. I imagine you would like to have it broken down by areas, too.

Mr. BUDGE. Yes. I would like to have the specifications as to what it was and what was given for it.

Mr. WIRTH. All right, sir. I might say all of our land is exchanged according to law and must be on equal value, and that is determined by BLM appraisal.

(The material referred to follows:)

NATIONAL PARK SYSTEM

Non-Federal lands acquired by exchange within existing boundaries since July 1, 1947, by fiscal years

Area	1948		1949		1950		1951		1952		1953 to Mar. 15		Total	
	Acres acquired by exchange	Acres conveyed in exchange	Acres acquired by exchange	Acres conveyed in exchange	Acres acquired by exchange	Acres conveyed in exchange	Acres acquired by exchange	Acres conveyed in exchange	Acres acquired by exchange	Acres conveyed in exchange	Acres acquired by exchange	Acres conveyed in exchange	Acres acquired by exchange	Acres conveyed in exchange
Glacier National Park	1	2											1	2
Olympic National Park	[1] 853		[1] 24						[1] 39		[1] 470		[1] 1,386	
Sequoia National Park			[2] 2	2			[2] 39	180					[2] 41	182
Wind Cave National Park					[3] 1,309	5,881					[1] 292		[3] 1,309	5,881
Yosemite National Park													[1] 292	
Theodore Roosevelt National Memorial Park									[4] 2,740	7,178	[4] 3,362	4,788	[4] 6,102	11,966
Arches National Monument											120	120	120	120
Chaco Canyon National Monument					3,200	3,201							3,200	3,201
Death Valley National Monument					9,573	9,567			4,400	4,401			13,973	13,968
Joshua Tree National Monument			18,234	15,028	8,190	1,035	3,524	560	27,003	11,936			56,951	28,559
Wupatki National Monument					7,290	7,290							7,290	7,290
Total	854	2	18,260	15,030	29,562	26,974	3,563	740	34,182	23,515	4,244	4,908	90,665	71,169

[1] Acquired by exchange for windthrown or otherwise salvable timber.
[2] Exchange made pursuant to the act of Dec. 21, 1943 (57 Stat. 603).
[3] Exchange made pursuant to sec. 3 of the act of Aug. 9, 1946 (60 Stat. 970).
[4] Exchange made pursuant to act of Apr. 25, 1947 (61 Stat. 52), as amended by the act of June 12, 1948 (62 Stat. 384).

NOTE.—All national monument exchanges made pursuant to sec. 8 of the Taylor Grazing Act, or lieu selection authority contained in legislation admitting States involved into the Union.

PROBLEM OF BALANCING THE BUDGET

Mr. NORRELL. I think what my friends are interested in is how we can continue to appropriate larger sums year by year, although the sums are needed, when we do not have the money with which to pay these expenses. We have talked more and more recently about balancing the budget, and I am one who wants to do that, and my Republican friends want to do it, also. We are all friends of your Department and others, and we want to do what is necessary, but we will be $10 billion over the income of the Government if we allow all of these budget estimates. I do not know what we are going to do, but we cannot go on spending. And yet when we come to the Park Service, I am very much interested in the Park Service.

Mr. WIRTH. I know you are.

Mr. NORRELL. Certainly I do not want to hurt the Park Service. But we must cut somewhere, it appears, and I hope we will get on an item that can stand it best.

CONSTRUCTION AND MAINTENANCE EXPENDITURES

I noticed in your comprehensive summary of this entire matter, which you will find on page NP–7, in adding those figures up there is over $28.5 million for construction. Now, you do not call it construction, but you have one item for $9.2 million which is for roads and trails, buildings and utilities, and so forth. The next item which you call construction is $17,919,000. In that item, No. 4, you want to buy more land and you want to acquire water rights to the tune of $3,250,000. The next item also is construction, totaling $28,619,000.

Now, when we think of appropriations for the Park Service, we think of money for Yellowstone National Park, Grand Canyon, and these other great parks throughout the country that we all hold dear. They are cherished highly. But most of this $28 million plus has nothing to do with Grand Canyon, Yosemite, and the other great parks that I could mention. I am wondering if we sould cut down somewhere on this construction.

Mr. WIRTH. Well, Mr. Norrell, all of our maintenance and repairs and rehabilitation and taking care of the physical improvements takes money, and all the parks which you mentioned are in the system. We do not use it for any other purpose but maintenance and repairs in those areas.

Mr. NORRELL. When you say you want to construct roads and trails, a lot of the money is for the salaries of the people who are engaged in the construction of the roads and trails.

Mr. WIRTH. You mean on the maintenance and repairing item here?

Mr. NORRELL. Under maintenance; yes.

Mr. WIRTH. Yes. On the maintenance and rehabilitation that includes salaries and materials for the upkeep of those roads.

Mr. NORRELL. You have to maintain them, and I agree with you there.

Mr. WIRTH. Our construction item is $17 million.

THE SUITLAND PARKWAY

Mr. NORRELL. You are branching out considerably. I do not want to encumber the record on this, but I notice you added one item here for a parkway that this committee cut out a year ago.

Mr. WIRTH. That is the Suitland Parkway.

Mr. NORRELL. I do not want to hurt these great national parks in our cuts, but I know Congressman Kirwan had a lot to say on that item a year ago. I know we did not make any appropriation for maintenance items that you have under parkways. I do not like that to be charged to the parks.

Mr. WIRTH. Mr. Norrell, the Suitland Parkway has been turned over to us, and it is our responsibility to maintain and protect. This $35,000 for Suitland Parkway is for certain repairs to the road. That road was built by the War Department during the war, and the slopes are falling down on the road, and the Government investment is going to waste on that, and we have no alternative but to come to you frankly and recommend that that has to be done in order to protect your investment.

COLONIAL PARKWAY

Mr. NORRELL. You have used a good illustration, but what is the necessity during a time of emergency like this to build some of the parkways that you find on page 73 for which we made no appropriation last year?

Mr. WIRTH. I would like to talk to you about the Colonial Parkway, because that is an item that has been in the budget for some time. It calls for $719,000. I made a statement this morning before the hearing started about which I would like to tell you, because that is an item in which I am very much interested, and a lot of people are very much interested in it.

We started the Colonial Parkway back in 1930. It runs from Yorktown to Williamsburg to Jamestown Island. The parkway was completed up to Yorktown. We built a bridge in the Jamestown section of the road between Williamsburg and Jamestown. However, we have done nothing on it since the war. The year 1957 will be the 350th anniversary of the landing at Jamestown Island of the first English colonists in America. It will also be the 175th anniversary of the Battle of Yorktown, which virtually cinched our independence. The restoration of Williamsburg exemplifies the height of the colonial period. The State Legislature of Virginia has set up a special committee to celebrate this event, and I know there is a resolution that is going to be submitted to Congress to set up a national committee to commemorate these particular events. The parkway was started back in the 1930's, and we have a bridge sticking out into the right-of-way, which has all been purchased, and it would be almost impossible to carry on this important event in our history with the parkway in its present uncompleted condition.

If this event is approved by Congress—and I cannot help but believe it will, because there is great public interest in it to make it a thing of national importance—we must start finishing the parkway this coming year.

This $719,000 a year, as you will note, is primarily for the dredging that is necessary around the river near Jamestown Island for the parkway roadbed and to protect the island from further washing away. That has to settle before you can start putting a road on it, and we have asked for the dredging money this year.

I want to give you all the facts in this matter, because if we get this appropriation, we are definitely coming back the following years for enough money to complete the parkway in 1956. I think the total cost is estimated to be $3,190,000, and this is the beginning of the completion of that section of the parkway. That is the capital colonial item, and that is why it is in here, because we feel Congress will want this celebration, the people will want it, and we should bring it to your attention this morning. If you are going to do it, you must start this year.

Mr. NORRELL. I would say it would be a very worthwhile project if we had the money. There is no argument about that. Jamestown reminds me of the area where the first white man landed on American soil, and it is a historical place. Down in my district is where the first white child crossed the Mississippi River going west. We hold that place kind of sacred down there. It was the first capital of the Territory of Arkansas. It was the first capital of the State of Arkansas. It was where De Soto died and where he was buried. It was one of the great supporting areas of the South during the War Between the States. And I could go on and on. But I do not know whether we should spend a lot of money on things like that unless we have it.

AMOUNT OF LAND TO BE PURCHASED

Now I will ask you about the acquisition of lands and water rights. I notice you have $3,590,000 for that. How much land do you plan to buy?

Mr. WIRTH. Mr. Norrell, we discussed that this morning at quite some length.

Mr. NORRELL. I do not want to go into it further, but just give me the number of acres.

Mr. WIRTH. The largest part of this $3½ million is for the finishing up of the purchase of the lands in Philadelphia around Independence Hall where we have already spent a little over $3 million.

Mr. NORRELL. You have not been Director of the Park Service very long. I have been on this committee, I think, with Mr. Jensen and Mr. Kirwan for a long time and I think we are the oldest members on the committee. Money has been requested year by year to finish up the purchase of property for these national parks. I am wondering if we will ever get through.

Mr. WIRTH. Not at the rate we are going at this time.

Mr. NORRELL. Could we exceed the speed limit and get through?

Mr. WIRTH. Yes, sir.

Mr. NORRELL. Is it possible?

Mr. WIRTH. Yes, sir.

Mr. NORRELL. It would be under you, but would it be carried out under someone else?

Mr. WIRTH. Yes, sir. This program, as far as the Park Service is concerned, is not my program. I am carrying on the program established back in the early days of the Service and approved by

Congress eliminating the private lands within boundary lines of the areas of the National Park System. Much of that land has been given to us, and much of it was taken out of the public domain. We can finish up in almost as short a time as you want us to finish, because we have all the land appraised and we know where the lands are.

Mr. NORRELL. There will be new costs.

Mr. WIRTH. There will be new costs if new parks are established, but very few are being established. I would not say there will never be any new parks or historical areas in this country.

Mr. NORRELL. It will be going on when Gabriel blows his trumpet.

Mr. WIRTH. In certain cases I will be there with Gabriel blowing his trumpet, because I think a lot of this work needs to be done.

Mr. NORRELL. I am afraid we will not be finished when that occurs.

Mr. WIRTH. Mr. Norrell, may I say something about finances—not that I know too much about them?

Mr. NORRELL. Yes. I wish you would.

VALUE OF NATIONAL PARKS

Mr. WIRTH. I do not know how we are going to balance the budget, because that really is out of my jurisdiction. I know the budget ceilings are set, and have been set, and I want to keep the construction funds down and the expenditures down. I know you gentlemen will review this with the idea of balancing the budget, but I repeat what I said in my opening statement—not word for word but in my own words. I think most of us feel it ourselves, and that is that the travel to the national parks and to the historical areas is becoming a tradition in American life and that it is a part of our way of life and that because of this there has developed a byproduct in the form of business to take care of travel that is an important economic factor to our country. The return to the Federal Government, to the local government, in the general welfare of the people, far exceeds anything Congress has ever appropriated for the parks or anything that the Park Service ever dreamed up that you should appropriate for it.

Mr. NORRELL. That is a noble statement, and I appreciate every word of it, but all the departments will emphasize their importance just like you are doing, but along other lines.

Mr. WIRTH. I do not doubt that at all. I think I would too, if I were in their place. But in my place, I do not think they have anywhere near as good a case as we have.

Mr. NORRELL. We will hear Dr. Day talk about salmon after awhile.

Mr. WIRTH. Fishing and hunting are some of the finest recreational sports in America; I will say that.

UNOBLIGATED BALANCE FOR LAND ACQUISITION

Mr. NORRELL. How much money has been appropriated and not yet obligated for acquisition activities? I think you will find that on page 82.

Mr. WIRTH. I have one item that I would like to discuss off the record.

(Discussion off the record.)

Mr. NORRELL. You have a certain amount of funds which are unobligated and unallocated?

Mr. WIRTH. The money we are requesting is unobligated. Obligations and commitments are two different things. I know when I was talking about the acquisition of a piece of land down at Colonial Park, Mr. Richey, our land man, told me we only had $40,000 left uncommitted and unobligated.

Mr. NORRELL. How much do you have unobligated as of today?

Mr. WIRTH. The record shows unobligated a total of $245,621.

Mr. NORRELL. As of today, how much do you have of unexpended funds for which checks have not been issued?

Mr. WIRTH. I do not have that here, but I could tell you what Mr. Ritchie said and that is that the commitments have covered all but about $40,000 or $50,000 of our funds. In other words, they are negotiating purchases and making options on all this because it fits into our use and development program. It does not become obligatory until there is a definite transaction involved.

Mr. NORRELL. That is the amount that you have as of January 31 which is unobligated?

Mr. WIRTH. Yes, sir. That is the way we have to report it.

Mr. BUDGE. Could I ask one more question?

Mr. JENSEN. Yes, sir. Go right ahead.

GROSS REVENUE OF CONCESSIONAIRES

Mr. BUDGE. Mr. Wirth, what was the total gross revenue of all concessionaires in the national parks and monuments for 1952?

Mr. WIRTH. I had that out just the other day, but I do not know whether they have it here or not now.

Mr. TOLSON. It is around $27 million, as I recall.

Mr. JENSEN. Can you get the exact amount?

Mr. WIRTH. Yes, sir. We have it. I do know they paid to the Federal Government $2.7 million in taxes.

(The matter referred to follows:)

	Gross business
105 principal concessions (gross business in excess of $10,000)	$28, 301, 997
40 other concessions (gross business less than $10,000)	145, 384
Total, 145 concessions	28, 447, 381

Mr. BUDGE. Yes. But everyone in business pays taxes. That is a misconception that all of you fellows have. Everyone pays taxes.

Mr. WIRTH. That is right.

Mr. BUDGE. Actually the only thing we have to consider here, as it appears to me, is the ludicrously small amount of $170,732.10 on a gross business which I am sure must be at least the figure you mentioned of $27 million.

Mr. TOLSON. It is approximately that.

Mr. WIRTH. There is more than that which is shown on the record and I will give you the explanation. We have tried to work out an agreement whereby we could use part of the fee to put in sewers, water, and so forth, needed before further visitor facilities could be provided and submitted the matter to the Comptroller General and the Attorney General for a ruling and at the same time we instructed

the concessioners to hold up payment until we gave them further instructions. We received an adverse ruling, and the money is coming in but does not appear in there.

Gifts and Contributions

Mr. Budge. Who is this very generous individual who gave you $33.57, which seems to be the extent of your cash contributions?

Mr. Wirth. It is more than that, sir.

Mr. Budge. On the first page of your justification you list gifts and contributions as $33.57. I am just wondering who that individual is.

Mr. Wirth. There must be some mistake as I know of one contribution of $618,000.

Mr. Neilson. The statement which you have, Mr. Budge, is the one on revenues. The donations to which Mr. Wirth referred go into a trust account and are available for expenditure. The one you have goes into the general fund, and most of that comes from Yellowstone National Park where the visitors throw coins and other debris into the water pools, and each year they clear the pools out, and that is where the contributions and gifts come in.

Mr. Budge. I think that is a very illuminating statement—"coins and other debris." I was just interested in that figure of $33.57.

Mr. Wirth. I would like to tell you how much we did receive in contributions.

Mr. Jensen. You can put it in the record, Mr. Wirth.

Mr. Wirth. All right, sir.

(The matter referred to follows:)

Cash donations for purposes of the National Park Service, by fiscal years

	Amount		Amount
1920	$1,835.50	1937	$30,065.13
1922	5,600.00	1938	63,556.50
1923	1,924.79	1939	53,283.40
1924	2,909.19	1940	60,483.50
1925	1,445.41	1941	77,025.41
1926	2,471.61	1942	77,241.56
1927	27,151.69	1943	32,601.00
1928	47,156.90	1944	29,750.00
1929	45,506.23	1946	21,596.91
1930	45,100.29	1947	2,093,662.00
1931	34,469.12	1948	20,866.26
1932	255,033.63	1949	62,204.30
1933	297,199.77	1950	44,077.00
1934	285,383.32	1951	63,519.55
1935	588,912.37	1952	770,273.89
1936	65,307.64	1953 (as of Jan. 31, 1953)	125,668.75

Note.—No donations received for fiscal years 1921 and 1945.

Concessions Contract Difficulties

Mr. Jensen. There is, of course, a very important factor involved in these contracts with concessionaires, and we realize it. Their season is short in which they have a chance to make some profit. We also realize that unless they do make some profit, they will not expend their own money to improve the facilities. We are only too well aware of that. Certainly we hope you can keep these concessionaires who have proven to be good businessmen, willing to spend

their own money for the improvement of the parks, and who want to do the things that everyone wants done. I think that can be summed up in a very few words, and that is to see that the visitors to those parks are well taken care of and treated courteously, as Americans are entitled to be treated. Generally speaking, I think they are. I think the present concessionaires are doing a very good job in that field. Your idea of giving long-term contracts to the concessionaires is good and it is proper that you want to appraise the contracts every 5 years.

I think that is all well and good. The thing we are interested in, of course, is very simple, and that is to see to it that all the taxpayers of America get their fair consideration on this thing and that those who attend the parks do pay the Federal Government a just compensation, whether it be the tourist, the visitor to the park, or the concessionaire. I know a good number of these companies that have these contracts in the parks, and I have learned to know them as fine Americans wanting to do right. These contracts are now in force, and Uncle Sam wants to keep his word. He had better keep his word.

Mr. WIRTH. Yes, sir.

Mr. JENSEN. Whether it be to 1 American, 10 Americans, 1,000, or 155 million. So we simply will ask you, Mr. Wirth, to counsel with your staff, meet with your counsel as you see fit to work out new contracts. All we want and all we expect is fair and just treatment to the people and to their country. So with that I say thank you very much, and we will be visiting with each other at regular intervals.

Mr. WIRTH. We want to say we appreciate very much the courtesy which has been accorded us and the opportunity to speak freely and openly on just how we feel on these matters.

MONDAY, MARCH 2, 1953.

BUREAU OF LAND MANAGEMENT

WITNESSES

MARION CLAWSON, DIRECTOR
G. M. KERR, CHIEF, DIVISION OF RANGE MANAGEMENT
DEPUE FALCK, CHIEF, DIVISION OF ADMINISTRATION
JAMES P. BEIRNE, CHIEF, BRANCH OF BUDGET AND FINANCE
ROYAL K. PIERSON, CHIEF, BRANCH OF SOIL AND MOISTURE CONSERVATION

EFFECT OF REORGANIZATION OF BUREAU

Mr. JENSEN. We have before us today the Bureau of Land Management, of which Mr. Marion Clawson is the Director. Mr. Clawson and his staff appearing here with him will try to justify their appropriation for 1954, which is $1,335,000 more than during the preceding fiscal year.

Mr. Clawson, how long have you been with the Bureau of Land Management and how long have you been the Director of the Bureau?

Mr. CLAWSON. It has been almost 5 years since I became Director, Mr. Chairman. You may recall I became Director on the 4th of

March 5 years ago, and on the 12th of March I was before your committee, which was 8 days later, in connection with the request for fiscal 1949.

Mr. JENSEN. Yes. I remember that very well. And under your management the Bureau of Land Management was reorganized to quite a degree. Do you feel that that reorganization has been good?

Mr. CLAWSON. Yes, Mr. Chairman. I think the reorganization and the changes we have made have been very definitely beneficial and good in the interest of greater efficiency of public business. I think we have accomplished more work now with the same manpower than we did earlier, and I think we give prompter and better service to the public. And I think our conservation of resources is better. I do not mean to imply that we are perfect yet. There are a great many respects in which further improvement is possible and which we are striving to bring about now and in the months and years ahead. There probably will always be opportunities for improvement, but I certainly feel that the changes in the last 5 years have been very beneficial and in the right direction.

REGIONAL AND FIELD OFFICES

Mr. JENSEN. I think that is a very fair statement.

Now, before I ask you to make your regular statement, I want to make this request so that you and your office and your staff will have plenty of time to get the information in the record.

I note you have hanging on the wall before us a map of the United States on which are placed round green dots and red dots and triangular black dots. I presume those indicate where your regional districts offices and area offices are located.

I would like to have placed in the record the names of the places where these offices are located, the number of people employed in those offices at the present time, and the number of people you are requesting in this budget for 1954 to be employed in those offices.

I am asking you to do that now in order to give you time to get that information to us before these hearings close—I mean the hearings for the Bureau of Land Management—because we want to take a look at them.

Mr. CLAWSON. We will be very happy to provide that information, sir.

Mr. JENSEN. All right. You do that. If you can get them to us today or by tomorrow noon, we will appreciate it very much. Do you think you can do that?

Mr. CLAWSON. Yes. We already have it for some of the offices, and it would be just a matter of subdividing our data a little bit more than we have already.

Mr. JENSEN. And at that time I shall ask you to justify the number of people who are employed in each office. Also, I want you to be prepared to tell us what they do and if it is possible to reduce the number of offices, to consolidate some offices, and to reduce the personnel by so doing, and I shall expect you to so state. Because, as you know, it is not only the Bureau of Land Management that has offices scattered so thickly all over the reclamation States; every other agency of the Interior Department has a similar setup, to the end that the 17 Western States are honeycombed with Federal offices of every nature.

Certainly many of those offices can be consolidated, the personnel can be reduced with great savings made for the taxpayers of America, and you can still do the job it is necessary to do, possibly even more efficiently.

I am giving you this advance notice now to be prepared to justify as best you can your organization form top to bottom.

(The matter referred to is as follows:)

There are four types of field offices in the Bureau of Land Management. These offices serve a variety of functions which cover a wide expanse of territory in the western United States and Alaska.

It has been the policy of this Bureau to decentralize as much of its work as possible to the actual point of operation. A great deal already has been accomplished and steps are being taken to continue through to the final objective. To implement the program, the Bureau has established regional offices and the field offices, which are primarily the action level.

Prior to the establishment of the Bureau of Land Management more than 6 years ago, its predecessors operated some 122 offices in the Western States and Alaska. There has since been undertaken a definite program of consolidation and reorganization with the idea of eliminating unnecessary offices and retaining small service offices on the ground which would operate in the interest of the general public and economy.

At the present time there are now 81 of these offices or a reduction of 41. Regional offices have been reduced from 14 to 5. Land offices have been reduced from 25 to 14; the survey offices in operation 5 years ago have been abolished and combined with land offices, and through consolidation grazing offices have been reduced from 57 to 50.

One of the duties of regional offices is the coordinating and supervision of actual operations. Without them it would be necessary to perform this work from the Director's Office, requiring many more personnel and entailing much greater cost. Regional boundaries were established with the viewpoint of keeping them small enough to permit close touch with the local needs and economy. Operations of private and State interests with their numerous and conflicting activities are tied in with use of the public resources, and cooperation and coordination with various local programs must always be worked out.

At the same time regional areas were made sufficiently large to permit as great flexibility as possible and not be unduly burdensome and expensive in such a wide-flung area as the Bureau administers. The regions have proven far superior as an organizational medium for getting work done than was formerly the case when it was supervised from a central point in Washington. We feel that better results have been accomplished without any increase in cost.

As presently constituted, there are a relatively large number of employees located at the regional offices as a matter of expediency who are not a part of the overall supervisory staff but whose work carries them to all parts of the region. They include cadastral engineers who are essentially field men and are assigned at various places within the region, usually a different place each year; mining engineers and field examiners whose work is farflung and not at one point for an extended period. The workloads in the individual districts are inadequate to assign such employees to these offices.

In addition the regional offices carry a material part of the housekeeping functions of the Bureau. Their fiscal activities involve responsibility for the collection of more than 110,000 accounts. The large collection activities of the Bureau is a factor in employing more fiscal personnel than is required in the average bureau whose functions merely require the expenditure of appropriated funds. All payrolls and disbursements, employment, purchasing, and similar features are carried on at this level.

Furthermore, the legal problems are much more numerous and conflicting than in average bureaus because of the multiplicity of laws under which the Bureau must operate. The handling of appeals, protests of all types of actions, settling of disputes and the development of agreements covering many phases of public land and resources are among duties handled in the regional offices. Such duties are essentially operating matters and require the highest type of specialized help. Ordinarily, supervision as the term is generally understood requires only a small part of the time put in by regional office employees.

There are 2 land and survey offices in California and Alaska and 1 in each of the other 10 Western States, or a total of 14. It is at this point that the basic

land records are maintained, applications for land, oil and gas and mineral leases are received and acted upon. There is a large amount of local business in each one of these offices which serve a variety of local interests.

The 50 grazing offices and 10 forestry offices make up the bulk of all field offices. These offices are the medium of dealing with users on the ground. In most of them there are less than a dozen employees. These offices handle grazing leases, small timber sales and other permits or actions. General management of the area is provided including the activating of soil and moisture-conservation and reforestation programs. This type of office has expedited work materially.

The Bureau does not feel that it has completed its consolidations and as a matter of fact has eliminated four offices since the budget was first submitted. However, it is reaching a point where further consolidations will not bring any important savings or benefits. We cannot arbitrarily or quickly delegate functions or move offices since the problem of securing personnel with required specialties and ability to absorb work volumes is a difficult task. The Bureau, however, expects to continue upon this program with which it has effected material accomplishments.

Bureau of Land Management, analysis of positions by location and kind of office

Location	Number of employees	
	1953	1954
Washington office	233	257
Regional offices:		
Portland, Oreg	108	109
San Francisco, Calif	54	57
Billings, Mont	42	47
Salt Lake City, Utah	54	59
Albuquerque, N. Mex	41	44
Washington, D. C	12	13
Anchorage, Alaska	29	29
Total regional offices	340	358
Field staff headquartered at regional office:		
Anchorage, Alaska	23	23
San Francisco, Calif	39	40
Billings, Mont	6	5
Albuquerque, N. Mex	18	18
Portland, Oreg	26	28
Salt Lake City, Utah	7	7
Washington, D. C	6	6
Total field staff at regional offices	125	127
Grazing district offices:		
Arizona:		
Phoenix	11	11
Safford	6	7
California:		
Bishop	4	4
Susanville	4	5
Colorado:		
Denver	3	3
Montrose	5	6
Canon City	7	7
Grand Junction	6	7
Durango	5	5
Craig	9	10
Idaho:		
Boise	10	11
Burley	11	11
Idaho Falls	6	7
Salmon	4	4
Shoshone	8	9
Montana:		
Malta	5	6
Miles City	10	11
Whitehall	5	3
Lewistown	3	3
Grazing district offices—Con.		
Nevada:		
Elko	9	10
Las Vegas	6	6
Winnemucca	8	8
Battle Mountain	4	4
Carson City	5	5
Ely	4	4
New Mexico:		
Albuquerque	11	11
Socorro	7	8
Farmington	7	8
Roswell	6	6
Las Cruces	10	11
Oregon:		
Lakeview	5	5
Burns	9	9
Vale	10	11
Prineville	4	4
Baker	5	5
Utah:		
Murray	4	4
Brigham City	5	6
Fillmore	11	11
Richfield	4	5
Price	5	6
Kanab	4	4
Cedar City	7	7
Monticello	5	5
Vernal	3	3
St. George	6	
Wyoming:		
Worland	9	11
Lander	12	12
Rawlings	5	5
Rock Springs	6	8
Pinedale	3	3
Total grazing district offices	321	341
Forestry District Offices:		
Alaska:		
Anchorage	12	12
Fairbanks	13	15
Arkansas: Russellville	9	15
California: Redding	4	6
Oregon:		
Eugene	24	24
Coos Bay	24	24
Roseburg	22	22

Bureau of Land Management, analysis of positions by location and kind of office—Continued

Location	Number of employees	
	1953	1954
Forestry District Offices—Con.		
Oregon—Continued		
Medford	22	22
Salem	25	25
Bend	10	11
Total forestry districts	165	176
Land and/or survey offices:		
Alaska:		
Anchorage	10	23
Fairbanks	4	16
Arizona: Phoenix	7	19
California:		
Los Angeles	17	25
Sacramento	11	20
Land and/or survey offices—Con.		
Colorado: Denver	18	30
Idaho: Boise	9	18
Montana: Billings	34	49
Nevada: Reno	6	14
New Mexico: Santa Fe	18	30
Oregon: Portland	9	19
Utah: Salt Lake City	18	29
Washington: Spokane	9	10
Wyoming: Cheyenne	21	32
Total land and/or survey offices	191	334
Grand total	1,375	1,593

General Statement

Mr. Jensen. You may go ahead with your statement, Mr. Clawson.

Mr. Clawson. Thank you, Mr. Chairman. I would like to submit for the record this prepared statement, which is rather long and in some detail, and I would like for your benefit to summarize it rather briefly as an introductory statement.

Mr. Jensen. We will be glad to have your prepared statement for the record.

(The matter referred to follows:)

The Bureau of Land Management is responsible for the administration of valuable natural resources owned by the people of the United States. These resources are varied in character, as well as valuable. They are greatly in demand by various classes of users, and the revenue obtained from their lease and sale greatly exceeds the expenditures of the Bureau.

The Bureau of Land Management seeks to conserve and develop the resources under its administration. It seeks to promote their use by private persons, and to facilitate such use. It seeks also to carry on its work efficiently, with maximum results at minimum cost.

In order to present the Bureau's programs adequately, consideration of the national resource situation is necessary.

NATURAL RESOURCES IN THE AMERICAN ECONOMY

The people of the United States as a whole have generally taken their basic natural resources for granted. Throughout most of the last 175 years natural resources seemed almost unlimited. Today, many of our vital resources are in short supply. A new look at the supply of all basic materials is clearly demanded.

Present consumption of materials and projections of future needs show how critical natural resources are in an expanding industrial economy such as ours. In the United States, we are now using over 2½ billion tons of natural materials each year, or 18 tons of materials for every man, woman, and child. This huge consumption is basic to the growth of the American economy, which has been almost fabulous. From 1900 to 1950, the population doubled and the national economic output increased fivefold. As a result, we have drawn heavily on our storehouse of natural resources. Of nonreplaceable resources, we are now using 30 times the crude oil we used 50 years ago, about 2½ times the coal, 26 times the natural gas, 3 times the copper, and 3½ times the iron ore. We have also drained our renewable resources. For example, we have cut 90 percent of our original virgin commercial forest. We have abused our agricultural land and abandoned some of it. Even water has been heavily exploited and is becoming truly scarce in many communities.

Though our present use of resources is great, our future needs will be even greater if coming generations are to enjoy the American standard of living. We have the responsibility for passing on to succeeding generations prospects for continued well-being. This is going to be an increasingly difficult task.

Estimates of the future need for materials indicate the requirement for a 50 to 60 persent increase in materials by 1975. Future demands vary greatly from item to item, including a 100 percent increase in petroleum and natural gasoline, an 85 percent increase in nonferrous metals, a 90 percent increase in other minerals, a 42 percent increase in foods, and a 50 percent increase in pulpwood for paper. All in all, in 1975 we will need 3½ billion tons annually from our own resources.

The United States is using up its resources faster than any other nation in the world. Many of our allies are low on basic resources. The consequences of this trend are obvious. To change the trend will tax the ingenuity of every segment of our economy, private as well as governmental.

THE ROLE OF FREE ENTERPRISE

The capacity of the American private-enterprise economy to produce goods and services has been demonstrated beyond any question. Our industrial system has constantly worked to lower real costs for widespread consumption. There is every reason to believe that private enterprise will serve as well in the future as in the past.

One of the most striking illustrations of the American faith in individual initiative and private enterprise is found in the history of the public domain. The dominant feature of public land policy in the United States is the belief that public resources should be developed by individuals acting in the capacity of private citizens.

The history of public-land settlement reveals the faith our Government has placed on free enterprise as the best method for development of the Nation. At its peak in 1850, Federal ownership of the public domain in the United States reached 1.2 billion, acres. By 1900, Federal ownership was reduced to 700 million acres by encouragement of private citizens to settle and develop the public lands and to acquire them in full title. Since 1900, further reductions in Federal landholding have taken place. In 1920, the public domain contained about 500 million acres. Today it is just a little more than 400 million acres, and disposals are continuing as individuals find economic uses for various parts of the public domain. Two-thirds of all privately owned land in the United States was once public domain.

Concurrent with this disposal program there developed policies of reservations of public lands for public use. Reservations also began with the early history of the country, encompassing such projects as military reservations on our frontiers, and in the very early 1800's reservations of timberlands for naval purposes. Highlights of the reservation program include the establishment of Yellowstone National Park in 1875 and forest reserves in 1891. The various types of reservations have different growth histories. Indian reservations, for example, have been reduced drastically in size since 1880. National forests had an initial period of rapid growth to about 1910, and after adjustment, gradual growth since then. Growth of national parks and monuments in area has been fairly gradual since 1872, while military reservations increased rapidly in size with the advent of modern warfare.

The development of Federal reservations brought into play a second aspect of private-enterprise use of Federal lands. Federal ownership of land has been largely restricted to management functions. Actual use and development of resources are in private hands. Timber is harvested by the private lumber industry, minerals by the private mining industry, forage by the livestock industry, and so forth. Recently, private use of public lands has been extended in formerly restricted areas. For example, adjustments are being made in the military use of military reservations to permit livestock operations in the same areas. Use permits are granted to Federal agencies instead of exclusive jurisdiction, wherever feasible. Every effort is made to integrate the public lands into the private economy, saving at the same time the public values in the lands.

Purchases for addition to Federal reservations also have a long history. However, the largest Federal purchase program started with the Weeks Act of 1911, for addition of lands to national forests. Almost one-half of the purchased lands owned by the Government today were acquired under this program. The next largest Federal purchaser is the Department of Defense, with more than 20 percent of Federal acquired lands. Several other agencies hold small amounts of acquired lands.

Total Federal ownership in the States today stands at about 456 million acres, of which more than 400 million acres are public domain in continuous Federal ownership since the early days of the Republic. The 456 million acres compare to about 458 million acres in Federal ownership in 1945, about 449 million acres in 1940, 445–447 million acres in 1937, and something in the neighborhood of 450 million acres in 1930.

The net result of the disposal reservation, purchase, and use policies of the Government in the last 25 years was, therefore, a very slight change in total Federal land ownership, and an expansion of private use of Federal lands. Since 1933, Bureau of Land Management holdings in the States have shrunk by more than 25 million acres.

THE FUNCTION OF GOVERNMENT IN THE NATURAL RESOURCES FIELD

The Federal Government may and should exercise many responsibilities in order to assist free business enterprise in insuring an adequate supply of natural resources. Most of these functions lie wholly outside of the administrative scope of the Bureau of Land Management and, hence, are not considered here. However, the Federal Government clearly has the responsibility for sound administration of the resources which it owns. The Bureau of Land Management, as the Federal land-managing agency with the largest total acreage to administer, naturally has large responsibilities.

In its management of publicly owned natural resources, the Bureau considers that its first duty is to promote the conservation and wise use of those resources. This generally means management of the renewable resources on a sustained-yield basis, and management of the nonrenewable resources with the minimum waste. Next in importance as an objective, is the facilitation of the use of these publicly owned resources by private persons. Every reasonable step should be taken to assist the private person or business seeking to use the public resources. Subject to these broad considerations, the Bureau is concerned with the receipts obtained from the sale and lease of these public resources. Important and large as these resources are, they are nevertheless limited, and in the nature of things available to some citizens and not to others. Since they are valuable, it seems only reasonable that fair charges for their use should be made.

RESOURCES ADMINISTERED BY THE BUREAU OF LAND MANAGEMENT

Reference has been made to the magnitude and diversity of the natural resources administered by the Bureau. Roughly 10 percent of the total land area of the States, and 80 percent of the land area of Alaska, are included in the Bureau's responsibility. In addition, it performs certain other functions, particularly mineral leasing and patenting, on large additional areas under surface management of other Federal agencies or private owners.

The total area administered by the Bureau, including certain reserved or withdrawn lands, is about 190 million acres in the States. Of this total, 160 million acres within grazing districts and 16.5 million acres outside are used for grazing by domestic livestock. It has been estimated that more than 6 percent of all beef cattle in the United States, and more than 23 percent of all sheep, graze at some season of the year on Bureau of Land Management lands. While these classes of livestock thus find only a small percent of their total feed supply, nevertheless the public lands are often a critical part of the total annual livestock operation. Much of the public-domain range is seasonal in character; without its use livestock production on a year-round basis would be seriously handicapped.

Approximately 5 percent of the total national production of petroleum and its products come from the public lands. The trend in this production has been upward, and more than 50 million acres of undeveloped public domain is now under lease for oil and gas. While the future production is unknown, it will be relatively much larger than in the past. Nearly all of the Nation's potash supply comes from public domain. Significant amounts of other minerals are produced on the public domain, and the possibilities for the future are much greater.

Of the national supply of commercial timber, including stands in Alaska, 48 percent is owned by the Federal Government, and of this, the Bureau in turn is responsible for 29 percent. Not counting Alaska, the figures are 40 percent and 12.5 percent. The annual production, or cut, from the forested lands under the jurisdiction of the Bureau is, as yet, only about half of the sustained-yield capacity of the lands in the States, and is negligible for Alaska.

The lands administered by the Bureau have important watershed values. A large part of these lands was naturally eroding when white man first entered those

areas. Through decades of unregulated use, and hence often of overuse, the plant cover on western lands has been depleted, with consequent increased erosion. A major program of watershed improvement and soil-erosion control has been begun by the Bureau, but needs to be expanded greatly.

The resources under the administration of the Bureau could be described at greater length and in more detail, but the essential point is that the resources are large in magnitude, however measured, and diverse in character. The resources can be briefly grouped as follows:

1. Surface resources, which fall into two groups (a) replenishable products of the land, such as timber or forage; (b) the land itself, for residence or other site purposes.

2. Subsurface resources, including primarily such minerals as oil and gas, potash, phosphates, etc.

There has been a steady and continuing increased demand for the use of all of these resources by individuals who seek to acquire a few acres on which to build a cabin or home, and by major companies in the various fields of mineral production in their efforts to seek sources of supply.

During the year just ended, over 100,000 inquiries were received from individuals primarily interested in small tract applications. Supplying the information requested is in itself a tremendous task. In fiscal year 1952, some action was required on almost 20,000 requests to acquire surface resources, and over 75,000 on leases of mineralized areas.

The intense interest, especially in oil and gas leases, can best be illustrated by the overwhelming volume of applications filed during a 60-day period on a single area in New Mexico. During this short period, almost 29,000 applications were received, a volume greater than the total mineral applications filed in any single previous year.

The total number of new applications for use of public domain, other than for grazing, has increased from roughly 10,000 annually during 1940–45, to 50,000 in the last fiscal year. This fivefold increase has been to some extent shared by all types of applications. While there has been a particularly notable increase in applications for oil and gas and small tract leases, there has been also a considerable increase in applications for homesteads, desert-land entries, public sales of isolated tracts, and other types of uses or dispositions of the public land. While this fivefold increase in total applications was occurring, the staff of the Bureau engaged in this type of work has not increased. In spite of this greater output per worker due to decentralization and simplified methods of operation, the backlog of applications increased last year because of greater public demand for multiple use of these areas. Such increased use has resulted in greater revenues.

The natural resources on the public lands, used as they are by private business form the base for a large contribution to national income. Combined with private capital, labor, and management, these publicly owned resources are estimated to contribute $10 billion to the total national income. For instance, the Federal Government gets a royalty of one-eighth the value of the oil at the well. When transported to markets, refined and processed in various ways and used for many purposes, this oil of relatively modest value at the well is the source of a large contribution to national income.

The Bureau has an outstanding record of revenue collection. Total revenues have increased from a level of $10 to $15 million annually during the war, to over $64 million in fiscal 1952, as the budget shows. Total revenues have doubled each 5 years for the past 15 years. In all the years of its existence, the Bureau and its predecessor agencies have collected over $1 billion in revenues, of which 50 percent have come since 1920. The Bureau has in this century collected more revenue than its appropriations, and in recent years has collected about five times as much.

During the fiscal year 1947, our appropriations were approximately $5 million, and the receipts of $21 million exceeded them by $16 million. During intervening years, the Congress has increased these appropriations so that in fiscal year 1953, the Bureau received a total of $13.7 million, but receipts have shown an even greater increase. During the current fiscal year our receipts are expected to reach $70 million, or $56.2 million in excess of our appropriations. For fiscal year 1954, it is expected that the receipts will be $60 million greater than the appropriation requested.

Recent studies by the Bureau clearly indicate that revenues will continue to increase. While it is impossible to predict future events with accuracy, there is good reason to believe that the Bureau may collect as much as $100 million annually within 5 years, and as much as $200 million annually within 10 years, assuming that appropriations adequate to carry full-scale programs are available.

BUDGET REQUEST FOR 1954

The budget request for 1954 has been formulated with the previously outlined factors and forces in mind. It was assumed that the Government has an obligation to make available, to the maximum extent consistent with good conservation, the resources on the lands it owns. Those resources are needed and in demand.

The 1954 budget requests include some increases, though not large in amount, as compared with former years. The Bureau is not unaware of the insistent demand for reduced Federal expenditures and a balanced budget. Nevertheless, reduced expenditures for the Bureau would be poor business, and would lead away from rather than toward a balanced budget. It "takes money to make money"; nowhere is this more true than in the management of natural resources. If wisely spent, and the Bureau pledges itself to wise and efficient use of funds, the amounts requested are fully justified in terms of their contribution to local, State, and national needs.

A brief review of the specific budget requests for 1954 will show their relation to the above objectives and to the total program of the Bureau.

(*a*) The first item is for lease and disposal of mineral resources. An increase of $132,000 is requested for this activity. As pointed out previously, the number of oil and gas and other mineral leasing applications has been increasing by leaps and bounds in recent years. Due to discoveries of oil in the Williston Basin of North Dakota, lease applications in that and adjoining States have increased enormously in the past 3 years, and there is good reason to believe that large numbers of applications will be filed in the months ahead. As a result, the Montana land office has fallen rather seriously in arrears. The increases requested for this activity will permit additional staff in this and other local land offices to put this work on a fully current basis.

Another type of work under this activity is the examination and patenting of mining claims. The Bureau has been subjected to considerable criticism, much of it justified, because of the long delays involved in examination and patenting of mining claims. Moreover, in many instances mining claims must be examined and if invalid, proved to be such in order to clear the land for Government programs, including timber sale, military withdrawals, and other activities. Part of the increase requested will go for this function and should enable the work to be brought more nearly current. None of the increases requested are for additional personnel in the Washington office.

(*b*) The second major item is for land use and disposal, for which an increase of $699,000 is requested. This general activity involves three fields of work or subactivities. The first is the adjudication of applications for land other than mineral applications. These include homesteads, desert land entries, small tracts, public sales, and a host of miscellaneous types of applications. The number of such applications has been increasing and the land offices have not been able to keep as nearly current as they would like. Some additional staff for the land offices and three additional persons for the Washington office for this function are requested.

The second field of work under this general activity is the classification of land. Most types of applications for land require field examination in order to determine the suitability of the land for the purpose sought. The total number of applications requiring field examinations has increased several times in the past few years, while the staff available for this work has not increased. In spite of substantial economies in operation, it has been impossible to keep this work current. The result has been to clear the applications out of the land offices only to have them delayed while awaiting field examination. The increases requested will help greatly in clearing up the large volume of pending cases and in bringing this work to a more nearly current position. All of the increases sought for this purpose will be for field personnel who will operate out of local offices. In addition to the examination of individual tracts, some classification is carried on for larger areas, including all public lands within particular watersheds. Much of this work is done in order to provide adequate information in connection with river basin and water development programs generally. In the past, very large sums of money have been spent for dams and other water developments, with little or no attention paid to conditions on the watersheds. Modest sums are requested to make studies in certain areas, particularly on the watershed of the Arkansas and adjoining rivers, for the Rogue River Basin in Oregon, and in the Colorado River Basin.

The third field of work under this general activity, and the one for which the largest increase is requested, is for records management. The land records in the Bureau of Land Management are the basic land title records for two-thirds of the private property in the United States. The present records system was devised about 150 years ago. It was based entirely upon handwritten records and upon

the assumption that all land would pass from Federal to private ownership. No consideration was given to the withdrawal and reservation of land or to the reservation of mineral and other interests less than full title or to the leasing of land or to the reacquisition of land by the Federal Government. Although the system has been modified somewhat during 150 years, it includes no modern method of records reproduction, and it is still seriously unsuited to the demands of the present. Moreover, the records themselves are physically disintegrating to an alarming degree on many instances. Errors as to public domain have inevitably crept into the records over the decades. Much more seriously, the records contain no information as to the lands acquired by the Federal Government, even though the Bureau has responsibility for mineral leasing and some other activities on acquired lands.

Following studies by other Government agencies and a firm of management engineers, it is proposed to construct an entirely new system of basic land records. These new records would be constructed primarily from basic land title records, such as patents, and should contain practically no errors. In addition, they would permit rapid and ready reproduction for private of public purposes. The system would be flexible enough that all information regarding acquired lands would ultimately be placed upon them. A new records system of this sort will aid the Bureau enormously in the conduct of its business. Even more important, this new records system will greatly assist private individuals seeking to use the public lands. The sum of $400,000 is requested for this purpose. It is anticipated that this project will cost between $1½ and $2 million for the 11 Western States, and amounts to continue it will be sought in succeeding years. If the new system is as useful as we anticipate it will be, and if the Congress wants to establish a single system of records for all Federal landholdings, the new records system should be extended ultimately to the remainder of the States, at an ultimate cost of perhaps $4 million.

(*c*) Another major activity is the forestry program in the Bureau. This in turn is divided into forestry on the O. and C. lands in western Oregon and forestry on public domain in the States and in Alaska.

For the forestry program on the O. and C. lands an increase of $192,300 is requested, all of which is for additional costs of fire protection contracts with the State of Oregon and the Forest Service. The forestry program on the O. and C. lands is an extremely important activity of the Bureau. However, due in part to relatively large increases in appropriations in the current fiscal year no increases for operating have been sought for 1954. The Bureau has an important and difficult timber salvage program under way. The magnitude of this problem appears to be much greater than it seemed to be some months ago because the damage from bark beetles has increased greatly. The storms occurring in January 1953 also caused wide damage, the full extent of which has not been realized as yet. However, the funds requested will permit pushing this program forward actively, and no operating increases are sought at this time.

The forestry activities on public domain lands in the States and in Alaska are divided into management and protection activities. Increases are sought in 1954 for both activities. The increases for management are to permit sales of larger volumes of timber, to provide better protection against trespass, and to make necessary timber inventories precedent to further increases in timber sales in later years. Since the receipts from this activity have averaged about $3 for each dollar expended, and since this proportion will extend to the increases requested, it appears to be good business to step up the scale of activity in this function.

Fire protection costs have risen both in the United States and in Alaska. Most of the forest land on public domain in the States is protected by State organizations under contract, with considerable additional acreages protected by the Forest Service on a repay basis. Fire protection costs have risen to these agencies and their costs must be borne proportionately by the Bureau. The fire hazard in Alaska has been increasing greatly in recent years because of the great increase in population and the extension of roads into new territories. The standard of fire control for the accessible areas in Alaska is now reasonably good but is highly inadequate in the more remote and less accessible areas.

(*d*) A major increase has been requested for the soil and moisture conservation program. Substantial acreages of the public domain have been and are eroding seriously. Good administration has helped greatly to prevent further deterioration and to allow natural recuperative forces to operate. However, in many areas conditions have developed to the point where specific direct erosion control measures are needed. The Bureau has had a competent and successful program under way, but the scale of activities has been much too low to deal effectively

with the problem. The increase sought will go entirely into programs in the field and largely into actual projects on the land itself. The Bureau has been working actively in cooperation with certain soil conservation districts in formulating comprehensive conservation and development programs for all lands within the districts. Much of the increase sought will go into an accelerated program within these districts.

An increase of $100,000 is requested for fire suppression in 1954. As a matter of fact, in the past appropriations for fire suppression have generally been augmented by supplemental appropriations to meet the actual costs of fire fighting. It is impossible to predict in advance the seriousness of the fire-fighting problem in any particular year since this depends so much on climatic conditions in that year. With the requested increase, it is anticipated that supplemental appropriations will not be needed in average years or years with less than average fire suppression problems. However, in the event of a severe fire year, supplemental appropriations would still be necessary.

For some additional activities, relatively small increases are requested for 1954, and for others no increases are requested. Where such increases are requested, their purpose is to bring the activity in question into balance with the scale of the program in other activities for which increases have been requested. For instance, small increases in general administrative costs will be necessary with the added volume of business and with the program contemplated by the total 1954 request.

Mr. JENSEN. I wish to add something else before you go on. Congressman Hamer Budge is necessarily absent from the committee today. As you know, I had delegated the chairmanship of this subcommittee on the Bureau of Land Management to Congressman Hamer Budge of Idaho. I did that because he is from one of the reclamation States and because of his great interest in reclamation. Also he is a member, and has been a member since he has been in Congress, of the Interior and Insular Affairs Committee, which deals primarily with matters pertaining to the development of the 17 Western States. Also, because of the fact he is a very able, conscientious Member of Congress and member of this committee, I felt it entirely proper that Mr. Budge should take that responsibility on his shoulders. I felt he was competent to handle the Bureau of Land Management hearings, and he was very glad to do it and appreciative of the opportunity. He will be back to the committee just as soon as he possibly can to carry on the hearings.

Thank you. You may go ahead.

USE OF PUBLIC DOMAIN BY PRIVATE ENTERPRISE

Mr. CLAWSON. Well, as an introductory statement, I would like to point out that the Bureau of Land Management is responsible for the administration of a large area of publicly owned land that is highly valuable and is in strong demand and active demand in the West.

This country of ours is a great and rich Nation, and it has been built up, in my view, primarily from two reasons. One is the great natural resources we have had, but even more important than that has been the private-enterprise system, the freedom of our people, the initiative of our people, and the initiative of our people to use those resources, which has been true for the Nation as a whole. It has been true of the publicly owned resources.

The federally-owned resources are used exclusively by private individuals and private businesses for productive purposes. The only exception to that is the use that the Government makes of its own land for military training and the like. But the timber, the grass, and the mineral resources and the like are all used by private

enterprise, and it has been the combination of large-scale valuable resources and private enterprise with its initiative and its energy and its capital that has brought these resources into use and added to the Nation's wealth.

The Federal Government undoubtedly has many functions to perform in this whole natural-resources field, and some of those are somewhat debatable, but when it comes to the management of the lands which it itself owns and which it retains title to, it seems to me fairly obvious that the Federal Government has an inescapable responsibility to make those resources available to private business as free and simple as it can.

We have sometimes said that our responsibility broadly viewed is first to conserve these resources, prevent their waste, and try to have resources for future generations, particularly the renewable resources—the timber and the grass—and in the case of the mineral resources, to prevent unnecessary waste or prevent waste in their exploitation. But close upon that, the full objective is to make those resources available to private individuals and private business for their use, to facilitate their use, to aid them in every possible way in getting the use of these resources.

You mentioned earlier some of the things we have done in the last 5 years in the Bureau, and I would like to say briefly, that most of our efforts have been directed toward aiding the individual citizen in getting the use of the public lands quickly and easily and without delay and without unnecessary burden on his part.

The third objective in a broad sense is to collect from these resources, new revenues from their use and exploration, because at best these resources are limited in extent and only some individuals can get to use them. It seems only fair that those individuals who use these publicly owned resources should pay for them a reasonable amount.

DESCRIPTION OF RESOURCES ADMINISTERED BY BUREAU

Now, I do not want to go into detail with this committee as to the resources which we administer, because I know you are quite familiar with them. In brief, we administer roughly 10 percent of the total land area of the United States. It is the driest, most barren part of the United States, or else it would not be under our jurisdiction. The processes by which land went into private ownership and the process by which lands were reserved for other Federal agencies and other Federal programs, in general, took the better lands—the better watered lands and the more fertile lands and the like. So, in general, it is the drier and less productive lands that we have.

That is a very large area of land, and it does produce a great deal. It produces a lot of grass. We have estimated that 6 percent of all the beef cattle of the United States and 23 percent of the sheep graze on the lands we administer at some time during the year. Relatively few of them find their total feed on the lands we administer, because by and large our lands are seasonally used. They may be used only for a month or 6 weeks. Nevertheless as part of a winter operation, the use that can be made in one season may be the key to the total operation for the entire year. You cannot graze more than a certain number of sheep in a certain season, and then that situation is limited

to the number you can graze on a year-round basis. So the grazing lands we administer are vital from the viewpoint of livestock production in the United States.

Approximately 5 percent of the total national production of petroleum comes off the public lands, and the trend in that production has been upward in recent years. We believe it will continue to go upward in the years and decades ahead. It is reasonable to forecast that the petroleum production from the public lands will not only increase in total but by a larger share of the total than has been true in the past. The acreage has increased very greatly in recent years, and some other minerals are found on the public domain. For instance, almost 100 percent of the Nation's potash supply is on public lands, and approximately 6 percent of all the phosphate reserves are on public lands; although so far the great bulk of production is on private lands, the reserves are on public lands to a very large extent.

Of the total national timber supply for commercial timber uses, something in the neighborhood of 5 or 6 percent is on public lands or under our jurisdiction. There are very substantial amounts of resources under our jurisdiction.

EXTENT OF INTEREST IN PUBLIC LANDS

Now, as I said a moment ago, the interest in these public lands has been increasing. You can measure that in all sorts of ways. The number of actual applications has increased. The number of applications 5 years ago or 5 to 10 years ago was roughly 10,000 a year. Last year it was 50,000 on a comparable basis. In other words, there has been a fivefold increase in the number of applications received. The number of inquiries we get—not actual applications but inquiries of interest—has increased even more than that. We have a tremendous volume of correspondence from people interested in the public lands. Now, much of that interest is somewhat idle and does not mature into anything, but it is indicative of the general demand for the public lands and the interest in them.

REVENUES

We in the Bureau have always placed a great deal of emphasis upon the revenue aspect of our operation. The revenue from the public lands we administered last fiscal year was $64.5 million. It is not very many years ago that that was around $10 million. That revenue has doubled each 5 years for the past three 5-year periods. Now, in part that has been due to higher prices and everything has been on a rising scale, but in large part it has been due to greater volume—larger volume of oil and gas produced, larger volume of other minerals, larger volume of land under lease for oil and gas development, larger volume of timber sold, and even larger acreage under lease for grazing. The volume has increased and the price has increased; so we have had a doubling of the revenue every 5 years. And such studies as we have been able to make indicate that there is every reason to believe the revenues will double in the next 5 years. They might increase more than that.

APPROPRIATIONS

The appropriations for the Bureau have increased, and this committee has helped us in getting larger appropriations. They have increased substantially, but the ratio between the revenue and appropriation has also increased in recent years. We have been getting five times the revenue that we have had in appropriations. There has been no time in the last 50 years when the Bureau or its predecessors have not returned more revenue than they have expended. The ratio for many years had been around 2 or 3 to 1, but, as I say, it has been running 5 to 1. I am frank to say to the committee it is our expectation that the years ahead are going to see the need for increased appropriations to the Bureau, but those increased appropriations will be far more than offset in terms of increased revenue. I think we can increase the revenue of the Bureau over the next several years very materially, but in part that is going to call for increased appropriations in order to do it.

I should like to say parenthetically that the revenue we get from these resources is in many respects minor or incidental compared to their importance to the Nation. For instance, we collect on oil production a one-eighth royalty measured at the well. Now, by the time you take that oil and transport it to a refinery and it is refined and distributed through the channels of trade to the consumers, the total value of the production is many, many times the royalty that is collected. Likewise with the timber that we sell in the woods. By the time it is harvested and taken to the mill and processed into a variety of products and transported to the consumer and used, it is worth many, many times as much. And again, it is private capital, private initiative, and private energy that is responsible for the transformation, but the resources are highly important, too.

BUDGET INCREASES FOR 1954

Well, now, the budget request for 1954 contains some increases. And I am perfectly aware of the fact that this is a period in which there is a great deal of intensified scrutiny into the whole Federal budget. The feeling toward a balanced budget is not only confined to Members of Congress or the administration, but there is a national feeling that I am perfectly aware of. But at the same time, it seems to us that the increases we are requesting are in the direction of a balanced budget. We cannot balance the national budget through the revenues from the Federal lands, but if we can increase the appropriations and as a result of that bring in $5 or more for every dollar we have appropriated, it seems to us we have moved in the right direction.

Now, much of the resources we administer are in relatively bad shape. As the committee knows, many of our lands were overgrazed and otherwise improperly used prior to the passage of the Taylor Grazing Act, when they were brought under definite supervision. We are faced with the necessity of rehabilitating a lot of resources that are in pretty rundown condition. I think in recent years we have made substantial progress in the beginning of a rehabilitation program. But it is only the beginning. It is only on a very small scale. We recognize that.

The increases that are in here for 1954 are of two main types. One is for the revenue-producing activities and related activities that go along with it, and the second is rehabilitation of depleted resources.

It seems to me that as a Federal agency we ought to be interested in our revenue and the business that comes out of it, but they are only secondary to the conservation of those resources and the things necessary to make this Nation strong. I think it would be a very bad national policy to try and get the maximum immediate revenue out of these resources and think nothing of the future. I think we have to leave these resources in very much more productive condition for 10, 20, 30, or 40 years into the future than we find them today. That is so because, as I said, they are already in a depleted condition, and I think we have to be in the position of a good landlord in improving his property.

That is going to call for some money, and there is no way of escaping the fact. You cannot bring about a major rehabilitation of some of these resources out of thin air. It is going to take some money. And yet that money and the necessary administrative money still are a small proportion of the total revenue that we collect.

As I said, the increases we have asked for mostly fall into those two categories of increases in revenue-producing activities or increases in the conservation program.

We have asked for some additional funds for the lease and disposal of mineral resources. That is one of the activities where the demand has increased enormously in recent years. It is also one of the activities that produce a great amount of revenue. Almost three-quarters of all the revenue we collect comes from the Mineral Leasing Act. At the present time, we are losing a substantial amount of revenue because we cannot act promptly on the applications before us.

I want to say we have done everything we know how to improve our efficiency in that field of work so we can act as promptly as possible with the staff we have, and we believe we can show you where we have increased the output by 5 times in the last 7 or 8 years—largely in the last 5 years but somewhat before that.

In one land office—the Billings, Mont., land office—which you visited last summer, Mr. Chairman, the work increased 9 times within 1 12-month calendar year. No increase in efficiency can meet any such tremendous increase in work as that. So we are asking for some increase in that item in order to handle the work more promptly and to bring in revenue more promptly and to aid private business in the development of these resources.

We are asking some increases in connection with the land use and disposal function, where again, although it does not bring in the same amount of money, it does bring in considerable funds. In that connection, we are asking for some funds to rehabilitate our land records. And that is a special matter into which you may want to go.

We are asking for some additional funds for forestry protection, partly for better fire protection and partly for larger timber sales and better timber management.

One of our larger increases is in the soil and moisture conservation program, where the objective is to increase the activity and rehabilitate the resources that have already been depleted over the years.

Now, I have in a general way covered what is contained in my general statement and, as I see it, have given you some of the high-

lights of the Bureau. Perhaps it would be much more useful if I would answer questions than if I would continue to talk further from this statement. I would be happy, of course, to answer any questions about the statement.

Charges for Oil and Gas Leases

Mr. Jensen. I think that is a very fine statement.

Before we go into the general questioning, I would like to ask a few questions pertaining to revenues.

What is the average charge per acre now for mineral leases?

Mr. Clawson. Well, in the first place, under the Mineral Leasing Act, we have different minerals which are open for lease. The chief ones are oil and gas; so I will confine my comments to them. The present charge is 50 cents an acre for the first year of the 5-year lease, no rental the second and third years, and 25 cents an acre the fourth and fifth years. The original lessee has the option of renewal for another 5 years on that basis. He can drill or do anything at his own option, and that is a 50-cent-an-acre rental straight through.

Mr. Jensen. Will you explain why you have a drop in the lease charged for the sixth, seventh, and eighth years?

Mr. Clawson. No, sir. I beg your pardon. The 6th, 7th, 8th, 9th, and 10th years it is 50 cents an acre. It is the second and third years which are free. It is 50 cents the first year, zero the second year, and zero the third year.

Mr. Jensen. Why is that?

Mr. Clawson. That is as a result of a specific act of Congress.

Mr. Jensen. So you have no rental charge in the second and third years?

Mr. Clawson. No, sir; not for the second and third years.

Mr. Jensen. Will you tell us why?

Mr. Clawson. That is as a result of a specific act of Congress which prohibits the Secretary from charging any rental the second and third years. The fixing of the rental is discretionary with the Secretary of the Interior except for an act which was passed sometime during the depression years which prohibited the charge of any rental the second and third years. We have sought to have that repealed so that a rental could be charged in the second and third years. A bill to that effect passed the House in the last session, but it did not receive any consideration in the Senate, or at least it was not reported out of committee. So there are no rentals under the law which could be charged for the second and third years. But the rentals in the other years are discretionary.

Mr. Jensen. What I am trying to find out is just why should not a charge be made for the second and third years. What is the purpose of that?

Mr. Clawson. Well, this took place before I came, and I have not gone back and read the hearings, but it is my understanding that the justification was in terms of giving to the lessees during the depression period a relief in various forms of charges, and the theory was that it would facilitate exploration of these lands for oil and gas production if the rentals were reduced. Now, our position and the Department's position is that we have been asking for a bill which would eliminate that and permit us to charge during the second and third years.

Mr. JENSEN. Of course, your crude oil has not risen in price comparable to other commodities. Is that one of the reasons why you are not charging any more than you did years ago?

Mr. CLAWSON. The price of crude oil has gone up since the war and was up during the war, during a period when rentals have stayed down. The present rentals were established in 1940, and they were established by reducing the rental that was previously in effect, and the present rental has stood since 1940 without change. It is my feeling that that rental is very much below what is being paid for private land and being paid for State land, and it is also my feeling that that low rental does not encourage oil drilling but, rather, encourages speculation.

Mr. JENSEN. Do you propose to recommend to the Secretary of the Interior and to the Congress that these lease rentals be increased?

Mr. CLAWSON. Yes; I do. We have already recommended to the Congress in the last session that we be given the authority to establish rentals in the second and third years, which we are now prohibited from doing. Of course, I do not want to commit the Secretary, but I am perfectly ready to recommend to him that the rentals be increased in some fashion for the whole of the first 5-year period. If the present law stands, you would still have nothing for the 2d and 3d years, but it could be set at a higher rate for the 1st year and for the 4th and 5th years and for the 6th, 7th, 8th, 9th, and 10th years.

Mr. JENSEN. Well, while everything else has gone up in value and has for many, many years, it appears to me and I think to most everyone that has anything to do with the Government that the things the Government has to dispose of or to lease should also go up commensurate with the rise in commodity prices. Now, here we are spending many, many times what we spent just a few years ago for the running of the Government's business, while at the same time we have not even come close to keeping pace with what the Government should charge for the things the Government has such as land leases and mineral leases of every nature. I think it is time to take a good and sharp look at it.

Mr. CLAWSON. Here are the charges. I do not know whether you want to put that in the record, but that indicates the rentals for the 5-year total period. As I said, they were decreased in 1940 to the present amount, and at that time the rentals for the 5 years were approximately $1 and the price of oil at the well was approximately $1. Today the price of oil at the well is approximately $2.50 a barrel, and rentals are still $1 for the 5-year period.

Mr. JENSEN. It does not make sense to me.

Mr. CLAWSON. Yes. In order to complete the picture of the revenue we get from the Mineral Leasing Act, considerably more than half of it is from producing oil and gas wells, in which case, with some exceptions, the royalty is one eighth of the production, so that your share of the quantity remains the same and, if the quantity produced increases, you share fully in the rise in prices. That is, I should say, in connection with the producing wells, a commercial arrangement. That is a very common arrangement in the industry. If you go out and lease land from a private owner, you pay a one eighth royalty if any oil is discovered. So I think in the producing leases the Government is getting essentially the same as a private owner would get, but on these nonproducing leases the amount of money

that is received has increased enormously in spite of the constant rental because the acreage has increased so greatly.

A few years ago the rental on nonproducing acreage was $1 million or less a year, but in the last fiscal year it was $14 million. So that is a very substantial item. If the rentals were raised, it is entirely possible that less acreage would be leased, but I do not think it would begin to compensate for the difference in rental. That is, I think, if you doubled the rental, you would not lease the same acreage by a good deal. As a matter of fact, it might be possible to reduce the acreage under lease without necessarily reducing the production in the future at all. We have been very much troubled—I do not know if you want to go into this—by the fact that a lot of people have applied for leases on the most speculative basis under the promotional program, and we could not believe they were seriously interested in oil development, but if you just get a lease, they feel the oil companies will beat a path to your door and give you a very nice arrangement whereby you will make a lot of money and you will not have to put up any capital. I think they are misguided and beguiled, because very little actual exploration is likely to result from that kind of lease. And yet we are swamped with the applications we receive. The leasing of noncompetitive wildcat land is, at best, a speculative business. If it was not speculative, of course, everyone would be richer from them. But still it should be at a reasonable rental.

DRILLING REQUIREMENT

Mr. JENSEN. Do you not have a clause in the lease to the effect that they must start drilling at a certain time after that lease has been signed by the two parties?

Mr. CLAWSON. There is no drilling requirement of any kind.

Mr. JENSEN. Do you not think it would be well to have such a provision in your mineral-lease contracts?

Mr. CLAWSON. I am sure such a thing would be contrary to the intent of the present act. And I am not sure we even have the authority to impose it. I am sure it would be resisted by the industry very actively. We have thought of different devices—and this is much more speculative for sometime in the future—but I think there is ample authority in the act by which we could establish a moderately high rental. I do not propose to define that, but a moderately high rental would be most helpful and then provide, as drilling took place, a substantial part of that rental would be rebated to the person who drilled. So you can provide a financial incentive to drilling. You would not impose a hard and fast requirement that he drill, but you would make it relatively expensive to own acreage without drilling. And yet, if he did choose to drill, it would help him financially and increase the desire to see the area explored and developed. And if they did drill and were successful, you would get your share in terms of production and royalties. That is something, however, that I think needs a great deal more study before we are prepared to make a definite recommendation regarding it, but it appeals to me very much.

Mr. JENSEN. I can see possibilities in that kind of a setup.

Timber Revenues

Since we are on revenues, does the price of the logs sold by the Bureau of Land Management compare favorably with the price of logs sold by private owners?

Mr. Clawson. Yes. I think it not only compares favorably but I think it is entirely possible that it is higher than by private owners, because in some instances, at least, some private owners, particularly if they are small owners, may be unaware of what they can get. As you know very well, the price of finished lumber and the price of stumpage have increased very rapidly in recent years. Take, for instance, the O. and C. area. Prior to the war our stumpage sold for roughly $2 a thousand, and during most of the war it was held down by the price ceilings, but stumpage prices have risen since the war until they now are in excess of $25 a thousand. And even that comparison underestimates the amount of the increase, because the $25 includes a lot of low-class logs which you could not have sold at all at any price in the earlier period.

In that period of rapidly rising prices, sometimes private owners, small owners in particular, were unaware of how rapidly the market had advanced. So I would say we are getting fully the value of the logs we sell.

Access Roads

Mr. Jensen. In that connection, have the Bureau of Land Management and the private logging concerns in the O. and C. land area come to any agreement as to how this money that is appropriated for access roads is to be used in the future?

Mr. Clawson. Yes. I think we have made very substantial progress in that, both for the access roads built under appropriations and for the access roads built by private operators, to serve both their own lands and the O. and C. lands.

The access-road program really has three parts. One is the building of roads out of appropriated funds. That is one of the latter items in our budget, and we would be glad to go into it in detail. But you also get private operators to build roads under an agreement in which the operator brings a road in to reach his own timber and bring out volumes of timber, but in so doing he opens up O. and C. areas and he agrees to allow the O. and C. timber to be transported over those roads by any purchaser of that timber, by either himself or anyone else. But if someone else purchases the timber, they pay to him a reasonable fee for the use of his road.

The third way in which roads are built is in connection with timber sales. If we sell a man a piece of timber, he has to build a road from the nearest available road into the tract of timber, and in that case the building of the road is really a part of the price of the timber. The timber is worthless unless you can get a road into it, but the road having been built may have considerable value for future use for that tract. Or you have other tracts even beyond it or adjacent to it or the like. Roads are built under all three of those general arrangements. I think our relationship with the industry has improved very considerably, particularly on the second of those, the cooperative-agreement approach. Since you were out with us last summer, we have signed another agreement, and we have still other agreements to

the point where we are ready to sign them and the companies are ready to sign them. So I think we are reaching a very much better understanding with the industry on that part of our program.

Mr. JENSEN. Well, I am glad to hear that. That fight was raging when we were on that trip. I got pretty sick of it. After I had listened to it day in and day out for about a week, I finally came to the conclusion that the solution was to take the money away from you. You had not had any kind of a controversy of that nature before the Congress made this access-road money available, but since that time you had been at each other's throats like barbarians. That is the only word I could use that would explain that controversy as I saw it. It seemed as though you were fighting like some wild animals over a little meat on a bone; we had thrown you a bone and it had a little meat on it, and you were all scrambling for that little bit of meat.

After listening to it for about a week and getting sick and disgusted with the whole thing, I finally came to the conclusion, as I told you out there in the middle of the forest, that the only way to stop this fight was just to take the money away from you and let you get along as you used to.

I hope that we will not have to do that because I know if that money is properly used to build roads back into the forests the little logger can get some trees, even though he is not able to build a road. About the only way to get his logs out and to help the little fellow is to appropriate money for this purpose. You think that you are getting along and getting things worked out?

Mr. CLAWSON. Yes, sir, I do. For the record I would like to say that I think most of the controversy related not to the use of the appropriated funds, but rather, to roads built under this agreement or arrangement where there were private-operator funds, and it was in connection with the terms and conditions on the use of the road that would be imposed upon him that the controversy arose.

Mr. JENSEN. I know that after we appropriated this access-road money you started having more troubles than you ever had before. So, it must have played a part in creating the controversy.

Mr. CLAWSON. Well, possibly it did, but I think the most serious difficulty was not with the appropriated funds and the roads built under them, but with the other roads, and I still say, as I said a minute ago, that there are very happy and better working arrangements between us and the industry.

Mr. JENSEN. I am glad to hear it.

RELATIONSHIP OF TIMBER REVENUES TO APPROPRIATION

Mr. CLAWSON. I would like to interject one other item here about this revenue now from forest products and timber.

Mr. JENSEN. Yes.

Mr. CLAWSON. The situation in regard to timber is almost exactly the reverse of the situation with regard to the Mineral Leasing Act. Under the Mineral Leasing Act we have had a high volume of activity and a low price, which, as I said a minute ago, has been steady since before the war.

Now, in the case of timber the price has been up tremendously.

As I said a minute ago it is up from $2 to over $25. The volume of timber has gone up somewhat, but the volume that we are getting on the lands that we discussed is still roughly half of the sustained-yield capacity.

It is somewhat more than half for the O. and C. lands, and somewhat less in the public-domain lands.

In part the volume is low because of this lack of access roads, and in part the volume is low because of the fact that we have not had the manpower to process timber sales. When we come to this section for timber outside the O. and C. area we can show for each year in the last 5 years that we have had increased appropriations, that we have had increased sales. We are fast stepping up both to get the cut of timber up to the sustained yield and which will call for larger appropriations.

That, I think, is one of the best possible illustrations of the fact that the receipts are in almost direct ratio to the amount of money spent.

If you were to multiply the appropriations by 10 we would not be able to multiply the receipts by 10, at least, for a year or for 2 years, but if you add to the appropriations gradually each year we can get the volume up and grow that much more timber. As you well know in those areas where you have matured forests you do not go in and grow more timber until you begin cutting that timber.

Our forestry program is a primary illustration of where adding to the appropriations was necessary in order to reach full productive capacity on the land.

Total Revenues and Their Distribution

Mr. Jensen. Now I would like to have the tables on pages 4 and 5 of the justifications inserted in the record at this point.

Mr. Clawson. We will be happy to do that.

(The matter referred to follows:)

Cash receipts covered into the Treasury, 1951–54

	1951 actual	1952 actual	1953 estimate	1954 estimate
Sales, public lands and materials	$518,979	$690,491	$750,000	$800,000
Fees and commissions	374,112	828,184	600,000	650,000
Mineral Leasing Act	37,073,008	43,680,379	45,000,000	47,000,000
Other authorized acts (mineral)	1,379,999	7,385,157	8,000,000	8,000,000
Grazing:				
Sec. 3	1,381,975	1,657,767	1,750,000	1,750,000
Sec. 15	301,417	321,744	400,000	400,000
Sales, Indian lands	9,302	1,675	1,000	1,000
Right-of-way leases	59,387	58,440	60,000	60,000
O. and C. and Coos Bay timber sales	6,717,445	8,439,858	10,500,000	12,500,000
Other timber sales	1,060,554	1,123,951	3,000,000	3,750,000
Miscellaneous receipts	206,153	330,750	250,000	250,000
Total	49,082,331	64,518,396	70,311,000	75,161,000

Distribution of receipts to States and counties, fiscal year 1952 (by States)

State or Territory	Sales of public lands and timber	Mineral leases and permits	Taylor grazing leases	Taylor grazing districts	Total
Alabama	$2,081.91	$1,857.88			$3,939.79
Alaska		8,556.89			8,556.89
Arkansas	1,107.03	391.97	$46.40		1,545.40
Arizona	869.14	57,350.57	17,360.11	$10,019.78	85,599.60
California	17,710.37	2,980,216.62	31,496.08	4,647.44	3,034,070.51
Colorado	4,166.59	2,349,255.15	13,237.52	11,307.68	2,377,966.94
Florida	1,104.95	1,180.88			2,285.83
Idaho	5,443.73	40,058.72	5,040.48	17,996.73	68,539.66
Kansas	42.94	28,314.12	29.49		28,386.55
Louisiana	48.00	20,604.76			20,652.76
Michigan	43.08	605.58			648.66
Minnesota	39.20		4.27		43.47
Mississippi	400.02	970.17			1,370.19
Missouri	113.61				113.61
Montana	2,608.35	784,487.08	16,233.91	11,694.02	815,023.36
Nebraska	348.26	23,203.88	590.41		24,142.55
Nevada	733.76	346,615.78	2,262.95	29,473.64	379,086.13
New Mexico	2,124.94	3,043,347.69	5,589.13	21,220.36	3,072,282.12
North Dakota	582.51	49,176.37	665.17		50,424.05
Oklahoma	108.58	27,298.33	118.10		27,525.01
Oregon	16,979.93	11,576.44	6,967.35	13,183.40	[1] 6,127,165.51
South Dakota	187.37	69,657.15	3,578.95		73,423.47
Utah	2,616.22	1,077,121.58		28,859.72	1,108,597.52
Washington	6,884.26	742.49	3,953.48		11,580.23
Wisconsin	218.10				218.10
Wyoming	2,030.56	5,469,342.22	52,424.80	23,982.41	5,547,779.99
Total	68,593.41	16,391,932.32	159,598.60	172,385.18	22,870,967.90

[1] Includes $6,078,458.39 on account of O. and C. and Coos Bay lands.

Management of Lands and Resources

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$10,292,605	$11,000,000	$12,985,000
Available in prior year	−22,581		
Reimbursements from non-Federal sources	81,780	64,000	64,000
Reimbursements from other accounts	240,151	192,000	162,000
Total available for obligation	10,591,955	11,256,000	13,211,000
Unobligated balance, estimated savings	−95,538		
Obligations incurred	10,496,417	11,256,000	13,211,000

NOTE.—Reimbursements from non-Federal sources above are from copying fees (64 Stat. 418) and from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
1. Lease and disposal of mineral resources	$536,951	$618,000	$750,000
2. Land use and disposal	1,056,376	1,212,000	1,911,000
3. Management of grazing lands	1,508,403	1,580,000	1,610,000
4. Forestry	1,746,752	2,405,000	2,750,000
5. Cadastral survey	751,172	963,000	1,000,000
6. Soil and moisture conservation	1,173,799	1,454,000	2,000,000
7. Squaw Butte Experiment Station	37,783	38,000	45,000
8. Fire suppression	391,892	150,000	250,000
9. Maintenance of physical facilities		25,000	25,000
10. Weed control	1,824,685	1,345,000	1,344,000
11. General administration	1,146,673	1,210,000	1,300,000
Total obligations from appropriated funds	10,174,486	11,000,000	12,985,000
Reimbursements from non-Federal sources:			
2. Land use and disposal	37,942	38,000	38,000
11. General administration	9,191	10,000	10,000
12. Replacement of personal property sold	34,647	16,000	16,000
Total obligations payable out of reimbursements from non-Federal sources	81,780	64,000	64,000
Total direct obligations	10,256,266	11,064,000	13,049,000
Obligations Payable Out of Reimbursements From Other Accounts			
1. Lease and disposal of mineral resources	29,040	26,000	20,000
2. Land use and disposal	56,953	16,400	17,000
3. Management of grazing lands	4,064	5,000	
4. Forestry	3,709	8,500	
5. Cadastral survey	109,192	110,000	100,000
6. Soil and moisture conservation	19,608	15,000	15,000
10. Weed control	586		
11. General administration	16,999	11,100	10,000
Total obligations payable out of reimbursements from other accounts	240,151	192,000	162,000
Obligations incurred	10,496,417	11,256,000	13,211,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Summary of Personal Services			
Total number of permanent positions	1,154	1,344	1,562
Full-time equivalent of all other positions	208	185	225
Average number of all employees	1,231	1,450	1,695
Average salaries and grades:			
General schedule grades:			
Average salary	$4,795	$4,823	$4,761
Average grade	GS–7.2	GS–7.8	GS–7.2
Crafts, protective, and custodial grades:			
Average salary	$3,121	$2,931	$2,945
Average grade	CPC–4.0	CPC–3.1	CPC–3.2
Ungraded positions: Average salary	$5,293	$5,713	$5,713
Personal service obligations:			
Permanent positions	$4,899,771	$6,105,100	$6,955,984
Part-time and temporary positions	666,365	602,500	743,721
Regular pay in excess of 52-week base	15,446	19,100	26,110
Payment above basic rates	130,804	123,000	153,785
Total personal service obligations	5,712,386	6,849,700	7,879,600

Obligations by objects—Continued

Object classification	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
01 Personal services	$5,510,824	$6,714,300	$7,752,200
02 Travel	510,064	616,500	711,000
03 Transportation of things	74,293	70,800	77,800
04 Communication services	72,459	59,800	62,400
05 Rents and utility services	85,817	36,700	28,600
06 Printing and reproduction	51,896	42,900	94,900
07 Other contractual services	1,608,200	1,588,144	1,893,700
Services performed by other agencies	50,435	66,256	64,300
08 Supplies and materials	1,159,536	920,500	1,051,600
09 Equipment	786,984	430,300	445,400
10 Lands and structures	256,868	448,700	797,700
13 Refunds, awards, and indemnities	3,431		
15 Taxes and assessments	7,594	9,700	10,000
Subtotal	10,178,401	11,004,600	12,989,600
Deduct charges for quarters and subsistence	3,915	4,600	4,600
Total obligations from appropriate funds	10,174,486	11,000,000	12,985,000
Reimbursements from non-Federal sources:			
01 Personal services	34,172	38,000	38,000
06 Printing and reproduction	10,440	10,000	10,000
09 Equipment	34,647	16,000	16,000
13 Refunds, awards, and indemnities	2,521		
Total obligations payable out of reimbursements from non-Federal sources	81,780	64,000	64,000
direct obligations	10,256,266	11,064,000	13,049,000
Obligations Payable Out of Reimbursements From Other Accounts			
01 Personal services	167,390	97,400	89,400
02 Travel	27,140	39,400	38,600
03 Transportation of things	744	900	300
04 Communication services	626	1,500	1,000
06 Printing and reproduction	7,222		
07 Other contractual services	18,032	28,300	16,200
08 Supplies and materials	18,779	24,500	16,500
15 Taxes and assessments	218		
Total obligations payable out of reimbursements from other accounts	240,151	192,000	162,000
Obligations incurred	10,496,417	11,256,000	13,211,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$983,527	$2,027,465	$2,427,465
Obligations incurred during the year	10,496,417	11,256,000	13,211,000
	11,479,944	13,283,465	15,638,465
Deduct:			
Reimbursable obligations	321,931	256,000	226,000
Adjustment obligations of prior years	59,449		
Unliquidated obligations, end of year	2,027,465	2,427,465	2,912,465
Total expenditures	9,071,099	10,600,000	12,500,000
Expenditures are distributed as follows:			
Out of current authorizations	8,147,021	7,090,400	10,700,000
Out of prior authorizations	924,078	1,553,000	1,800,000

LEASE AND DISPOSAL OF MINERALS RESOURCES

ECONOMIC STUDY GROUP

Mr. JENSEN. Under "Lease and disposal of mineral resources," what is the cost of operating your economic study group, and explain more clearly why such function needs to continue?

Mr. CLAWSON. Well, the costs are quite low.

At the present time there are only three employees in that group, and we have no intention of increasing it.

The function of that group has been to make just this sort of a study of revenues that we have been discussing.

Previously we had no one to make such studies and assemble such information, and I think, frankly, this is perhaps one of the reasons why we have not taken action in the past to attempt to increase these rentals, and I feel that the group can be very important in giving us information and suggestions on which we could increase rentals without actually injuring industry.

Mr. JENSEN. Who are the people in this group?

Mr. PIERSON. We have three people. One of them is named Roger Oscarson. One of his most recent jobs was as secretary of the Northwest Mining Association of Spokane, Wash.

He has had a long record in practical mining work himself, and we brought him in as someone who was familiar with the industry, the mineral industry.

The other man is William Vogelly, who is an economist by training. We brought him in from the Bureau of Mines to assist us in this work, and the third person is the secretary, whose name I do not know.

Mr. JENSEN. When was that group organized?

Mr. CLAWSON. Since the 1st of July.

Mr. JENSEN. Last?

Mr. CLAWSON. Yes; during the fiscal year, in October or November.

Mr. JENSEN. What have they been doing; have they made a report yet?

Mr. CLAWSON. They have been assembling for me a good deal of information on past revenues and on the possibilities of future revenues from the Mineral Leasing Act. As a matter of fact, the whole system of reporting on this leasing and the accounting for the revenue has never been designed to provide you with the information that I am sure any businessman would want.

For instance, what is the ultimate acreage that might be under lease under this Mineral Leasing Act? The Geological Survey at one time estimated that somewhere between 10 million, 15 million, and 20 million acres might be potentially available for mineral, oil, and gas production. Now, we have 50 million acres under lease at the present time, which is 3 times what they anticipated might be available for that purpose.

We have every reason to believe that the amount of that acreage will increase.

As to how much of this acreage which is now under lease was formerly under lease and was dropped, in other words how much of this land is released, the records are just not set up to yield such information, and one of the things these men have been doing, in addition to assembling information such as there is, is to consider what sort of information we do need and how we can best get that from our records so that we can present this committee and others with a realistic analysis of the revenue possibilities of this land.

ECONOMISTS

Mr. JENSEN. I notice that you have 28 economists in the Bureau at a total salary of $178,487. Now, just what do all of these 28 economists do?

Mr. CLAWSON. Where do you get 28 economists?

Mr. JENSEN. This came right from your Department at our request; they furnished that information to us.

Mr. CLAWSON. I think that most of them are listed in here under the heading "Land use and disposal." In other words, many of our people who examine these lands for the question of allowance of desert land, land entries, and homestead entries and the like are listed as economists, and are actually field men who are engaged in field examination. I was a little surprised because I can think of about six men who might be considered economists here in Washington. I think that would be the limit. That is why I was a little surprised as to your figure of 28, because we certainly do not have a large staff of economists. We have these 2 men on minerals, and 3 or 4 men here in Washington in our Land Section.

Mr. JENSEN. You know, Mr. Clawson, it has been the practice for many, many years to give high sounding titles to a lot of people in the Government in order to justify high salaries. Now, it seems to me that there has been somebody in every department lying awake nights trying to figure out some great, high sounding titles for employees, and here, I am afraid, is an example of that very thing. You yourself just admitted that you were surprised to know that there are 28 people in your Department who have the title of economist.

The chances are that if those 28 people had the title which they should have in accordance with the job that they are doing they could not qualify for the salary they receive, and I tell you that it is our purpose to find out.

We have now 75 people from private industry and from certified accounting organizations all over the country working in almost every department of the Government to ferret out these things that we think must be looked into in order to bring the Government down to a more businesslike basis.

I am not going to say right now that economists are not earning their money, that they are not earning the salary that is provided for economists generally speaking, but I am going to ask you to look into this matter and see how many of these people that are designated as economists should receive the salary that they are receiving today under that title. Will you do that?

Mr. CLAWSON. Surely.

Mr. JENSEN. All right. I want you to make a report to this committee on that, and we will determine whether it goes into the record or not.

Mr. CLAWSON. Yes, sir.

(The matter referred to follows:)

The 28 economists listed in the schedule of positions for the Bureau's program for 1953 include 8 in Washington and 20 in the various field offices. Of the total number, only two are engaged in what may be called economic investigation or research. In these two cases both involve work applied to the Bureau's operations, and as a result it appears the Bureau may be in a position to recommend steps which will result in increased revenue to the Government. The remainder are engaged strictly in operational activities in the matter of handling land

matters, including the voluminous number of cases filed under the many land laws.

A description of the eight positions located in Washington is as follows:

One grade GS–14. The incumbent of this position is the Chief, Division of Lands, who is responsible for the formulation, coordination, and execution of the lands program in the Bureau.

The Division of Lands embraces two specific operational units: One handling land-classification matters, which include appraisals of land, inventories of physical resources to determine the highest use, the methods to be followed in taking action and review of these actions. The other involves the gathering and analysis of statistical records and preparation of annual reports, including those required by law on the work done by the Bureau. These reports embrace land-area figures, production figures, involving use of resources, and estimates of income from resources on public lands. These units are each headed by a grade GS–13 land economist.

One grade GS–12 land economist is employed in the Washington office whose duties relate entirely to the land-classification function. Specifically it involves review of appraisals made in the more difficult land-classification cases wherein there are conflicts, and the handling of appeals.

One GS–12 land economist is employed to analyze operating programs of the Bureau to maximize the returns to the Government for use of land and surface resources by individuals. This includes studies of fee structures, volume of applications, effectiveness of programs, and effects of policies in practice on use of resources.

One GS–11 commodity-industry (minerals) economist has similar duties with respect to mineral resources on public lands.

One GS–12 land economist is responsible for setting the pattern and coordinating the preparation of plans to carry on the specific programs of resource development in which the Bureau is engaged.

One GS–11 land economist reviews land-classification cases which must come to the attention of the Director.

FIELD POSITIONS

None of the positions in the field are economists in the generally accepted definition of that term. Instead, the incumbents of these positions are fieldmen engaged in the development of land programs, in the actual field examination of cases, and classification of lands. They examine, classify, or appraise homesteads, small tracts, exchanges, and the other types of land actions the Bureau is concerned with. These men are all classified as agricultural economists, ranging from grade GS–9 to GS–12. They are the basis of the field force dealing with land actions and land cases. It so happens that the term "agricultural economist" is applied to a specific series as designated by the Civil Service Commission.

LAND USE AND DISPOSAL

DISPOSITION OF PUBLIC DOMAIN

Mr. JENSEN. How much of the public domain was actually disposed of or sold during the years 1951, 1952, and 1953, and how much will be disposed of in 1954 with the staff increase that you request?

Mr. CLAWSON. Well, the disposals take various forms. There are homesteads, desert-land entries, mineral applications and others, and they go through different steps. That is, you have applications made for them, and sometimes those applications are allowed, and sometimes they are disallowed. For instance, if someone comes in and files on a homestead in an area that is, in our judgment, completely unsuitable for homesteading, and we feel that he would be doomed to failure in that area based upon the experience of other bureaus we would not allow that entry, or, take another illustration which is much more common and realistic, a large number of people come in and file desert-land entries in a very arid area proposing to pump water from an underground source when it is available, and if we allowed all those entries then we would exhaust the supply, in that case we allow only as many entries as the available water supply will permit, and we disallow the others.

We have to deal with a number of States before they can get title. We put up some land for sale at public sale and they bid it in. What they have to do is put up the remainder of that price. The reason for that little explanation is because of the fact that there is a considerable difference in status between the entries that are made and the applications and between the entries finally completed and between the patents that are issued. That is, after the entry is completed and he completes that bid we must issue a patent, and there is unfortunately some delay in the issuance of the patent, in some cases by reason of the law, and in some cases by reason of our inability to operate more rapidly.

I have here a tabulation showing the number of applications by various types and the acreages involved in recent years.

Mr. JENSEN. We will insert the table into the record at this point.

(The matter referred to follows:)

Land disposals

ORIGINAL ENTRIES AND SELECTIONS

Type of case	1952		1951		1950	
	No.	Acres	No.	Acres	No.	Acres
Homestead	460	59,070	415	56,209	571	79,840
Desert land	165	29,255	224	44,687	146	26,834
Mineral applications	25	10,200	25	7,377	41	9,248
State selections	84	12,388	33	7,387	51	26,312
Other	1	2,240	2	5,114	1	40
Total	735	113,153	699	120,774	810	142,274

FINAL ENTRIES

Homestead	357	41,965	660	70,830	418	49,392
Desert land	47	6,579	75	10,593	60	9,888
Public sales	637	88,482	773	101,086	514	61,898
Mineral entries	114	22,217	113	12,800	89	22,986
Miscellaneous cash	1,025	5,673	459	2,634	348	5,344
Other	1	2	1	4	1	40
Total	2,181	164,918	2,081	197,947	1,430	149,548

PATENTS ISSUED

Homestead	417	44,725	560	63,424	461	56,498
Public sales	565	74,540	748	99,009	563	65,054
Mineral entries	48	5,162	87	22,367	94	26,946
Exchanges	1,157	8,941	197	152,647	243	254,130
Indian	561	1,367	782	1,128	687	12,957
Miscellaneous cash	128	215,286	395	6,344	472	19,091
Other	408	23,604	300	43,509	337	57,738
Total	3,284	373,625	3,069	388,428	2,857	492,414

GRANTS TO STATES

	1952	1951	1950
Acres confirmed	8,588	28,658	28,557

MINERALS AND FISSIONABLE MATERIALS RESERVED TO UNITED STATES

	1952	1951	1950
Acres reserved	344,188	304,741	388,446

Mr. CLAWSON. In recent years we have disposed of in general, 300,000 to 500,000 acres a year under various acts, but that is varied somewhat from year to year and it is very difficult to forecast exactly what it will be in the year ahead.

Mr. JENSEN. Off the record.

(Discussion off the record.)

Mr. CLAWSON. Let me say, Mr. Chairman, that in the Bureau of Land Management we follow a policy of selective disposal of public lands. We administer approximately 185 million acres of land in the States, plus, of course, a large acreage of land in Alaska under practically all types of entry today.

The Department and the Bureau has the responsibility and the duty of deciding upon the suitability of those lands for the purpose for which they are sought.

That broad authority is contained in section 7 of the Taylor Grazing Act which provides for the classification of lands, but there are other authorities as well. Those authorities were published by the Congress in view of the unhappy experience of two or three decades when any one could take any public land for any purpose.

I know we have seen thousands and thousands of acres of land through the West which were homesteaded and plowed up and attempted to be farmed only to be abandoned with the loss of capital by the people who had done it, and much more serious by accelerated erosion and destruction of the land and the like, so we do have the authority and the responsibility to classify lands before their disposal.

It is my personal conviction that the bulk of the lands that we administer should, and will, remain in Federal ownership indefinitely, but on the other hand it is our conviction, and we act upon this conviction, that there are tracts of those lands which should be disposed of. I say that based on broadly two grounds, one because the use for which they are sought requires that they be owned by the individual.

Now, mind you virtually all of the lands that we administer are used by one or more private individuals, for one or more purposes. Nearly all of it is grazing, but much of it is grazing and has timber on it, and one-third of what is grazed upon is under oil and gas lease, as much of that use of the land can and does take place under some sort of a rental lease or permit basis, but there are uses for which the owner requires, wants and should properly have title to the land, particularly when he builds upon the land, or when he converts it to crop use, and so in some cases the use that the owner wants to make of it requires him to have title.

The second broad purpose, or reason for transferring title to private ownership is because the tracts are just not suitable for economic public administration.

For instance, we have scattered tracts of land all through the Midwest, the South, and the Lake States. As far as I know we do not own any in Iowa, but we do have a few thousand acres in Michigan, in Wisconsin, and in Minnesota, and we have a good many thousands of acres in Arkansas. We have a few thousand acres in Louisiana, Mississippi, Alabama, and Florida. Now, those are very scattered tracts of land for the most part, and if they were not low-grade land they would not be still in Federal ownership, and, scattered as they are over large distances, it is not economical for us to administer them.

As rapidly as we can we have disposed of them.

The same thing is true of the States of North and South Dakota, Nebraska, and Kansas, and we have been carrying on an active program of the disposal of land in those circumstances which will shrink the acreage of Federal lands but not by large amounts relative to the total area of Federal land.

EXCHANGES OF LAND

Mr. JENSEN. Mr. Clawson, at least we have been hoping that something might be done to assist the Bureau of Land Management in exchanging Bureau of Land Management lands with the Forest Service, and with other departments of the Government. I mean to simplify the problem that you face in your attempt to exchange lands which should be exchanged between agencies of the Government. Would you care to talk about that?

Mr. CLAWSON. Yes; I shall be happy to.

There are roughly three types of exchanges, with Federal agencies, with States, and with individuals.

Now, properly speaking, the exchanges with Federal agencies are not exchanges because, after all, all the Federal land belongs to all the people of the United States. It is Bureau of Land Management land; it does not belong to the Bureau of Land Management, and it does not belong to the Forest Service.

Mr. JENSEN. I understand. It is under their jurisdiction.

Mr. CLAWSON. We have, in those instances, made exchanges. We have made transfers, without necessarily there being any transfers in the opposite direction.

For instance, we transferred to the Forest Service in western Montana 32,000 acres, I think, effective in January of this present calendar year—a month or 6 weeks ago. The negotiations had been under way for 2 or more years, and we transferred that acreage to the Forest Service because it consisted of scattered tracts of land, some if it actually within the national forest boundary, and others of it adjacent to national forests, and all of it remote from any office from which the Bureau of Land Management could have administered it, and so it seemed to us sound public administration and good national policy to transfer those lands to the Forest Service.

Now, we have other such transfers under contemplation, but there is no quid pro quo, no acreage coming back necessarily tied to them. I mean we are encouraging the Forest Service and other agencies to look at their holdings to ascertain if some of them might be more efficiently administered by us, but we are not insisting upon an exchange. That is why I said a minute ago that they are not properly exchanges. We are not insisting upon an equal value back and forth.

Now, with the States we do put them on an equal value basis. In the past 12 months we have made 2 major exchanges with States, 1 with the State of New Mexico where roughly some 100,000 acres of land were given to the State of New Mexico in return for certain areas, forested areas, within national forest boundaries which will be turned over to the Forest Service.

Then there was an exchange with the State of Montana where acreage within Glacier National Park was acquired for the National Park Service, and again heavily forested and scenic areas, and the

State of Montana acquired a much larger area of much lower grade public domain land, scattered land within its boundaries, which it can use.

Now, in those instances we insist upon equal value. We think we have the responsibility of retaining the Federal property intact as to value.

Is that the type of information you want?

Mr. JENSEN. Yes; thank you.

MANAGEMENT OF GRAZING LANDS

GRAZING FEES

Now, turning to "Management of grazing lands," for the record please tell us what fees are charged for cattle and sheep at the present time. I might tell you I know, but I would like to have it in the record.

Mr. CLAWSON. Yes, sir; I am sure that you know.

The present fee is 12 cents per month per head of cattle, and for sheep it is one-fifth of that amount, since we generally equate 5 sheep as equal to 1 head of cattle.

There are 1 or 2 limited exceptions to that—to this general fee of 12 cents per head per month for cattle.

Mr. JENSEN. Yes. How do those charges compare with the grazing fee charges on Forest Service lands, on Indian Service lands, on Park Service lands, and on private lands?

Mr. CLAWSON. I do not have the figures before me for each of those others, but they are all much higher than our charge basis.

The Forest Service fee, I suppose, must have been from 75 to 80 cents last year, and that is speaking from memory, as I do not have the figure before me, but it was certainly very materially higher than 12 cents.

The Park Service, with very few exceptions, has no grazing within national parks. Grazing is excluded.

On the Indian reservations the lands are tribal lands belonging to the Indians, and they are put up ordinarily under a competitive bid arrangement where they actually bid on the price to be paid.

Now, those prices vary greatly from reservation to reservation, but they, too, average much higher than 12 cents per head.

The prices paid for private land grazing are also very much higher, but, of course, in all these cases, and most particularly on the private land, the quality of the land and the quality of grass that is grown on it and the other feed varies considerably from our public land. That is, the public land that we administer is interspersed with many private holdings and the whole story of public land in the United States is that it was the better land that was taken into private ownership.

Your father, your grandfather and mine, if we accord them any intelligence at all, went out and chose what seemed to them the better lands, and in the case of the western lands it was the better watered lands. Water is generally on the private lands, and it was the more productive land. It was the arid and brush areas which were left in connection with Government ownership, so that a comparison between what is paid for all private lands and what we charge reveals that several times as much is paid for the private lands, and if you were to make a comparison on the basis of land of equal quality

and of equal value there would still be a difference. However, the difference would not be anywhere near as great as the data might seem to indicate.

SOIL AND MOISTURE CONSERVATION

Mr. JENSEN. Now, here we have a situation where public lands are interspersed with private lands. Without doubt the private owner did acquire most of the best land, I will grant that, but the private owner also practiced soil conservation, moisture conservation and the building up of his soil to a more productive stage, while the Federal Government has let its land go to pot, so to speak. As you know, the Government has spent less than 1 cent an acre for soil and moisture conservation on the public-domain lands and, consequently, the grazing on public lands has decreased in productivity while the grazing on private lands has increased in productivity.

It is very simple; it is very easy to know just why this has happened, and that is because we have simply let our public lands blow away, wash away, and erode away by not only failing to use soil conservation practices on our public lands, but also by overgrazing in many areas. This has now been stopped to some degree during the past years, because your Agency has tried to see to it that those lands were not overgrazed, and to a great degree, because there has been established among the cattlemen and the sheepmen organizations to cooperate with the Bureau of Land Management in that effort. However, the fact still remains that our public lands are eroding possibly five times faster than we are conserving them.

Now, that is one of the big problems which I see facing you and us in this whole Bureau of Land Management problem and the land use problem.

I know that you do not have enough soil conservation technicians. I know that you do not have enough people schooled in the art of conserving soil in your Department. I also know that there is just one organization in this country of ours that does know how to do it. The American people are convinced it has done a wonderful job since 1935 when that great man, Mr. Hugh Bennett, took it upon himself to see to it that this Nation did not become a "have not" nation like every nation in the world which forgot that their soil would wear out. They built up an organization of men, and they have done a great job.

Mr. Clawson, how would you feel about turning all of the soil and moisture conservation problems of the Bureau of Land Management over to the Soil Conservation Service and providing them with sufficient money to do this job?

Of course, we would have to make an appropriation through your organization. This committee would have to make an appropriation to the Bureau of Land Management, I presume, and then the Bureau of Land Management would make that amount of money available to the Soil Conservation Service to go ahead on all your public lands and work with you in this great problem which we face of stopping this terrific erosion which is taking place every day on our public lands.

I am not going to ask you, unless you feel so inclined, at this minute to give a specific answer to that question, but I certainly do want you to think it over, and then in due time tell us. I do not suppose we can get this thing started in the fiscal year 1954, but I am going to keep on working on it until something is done to bring about a program of

soil conservation and moisture conservation on our public lands, a program that far exceeds what we have been doing up to the present time. We would like to feel that we are getting this job done on the conservation of our precious soil on these public lands.

Do you care to make a statement on that at this time?

Mr. CLAWSON. Yes, I would.

I appreciate your saying I do not have to make a final statement now. I would like to make a comment or two at this point.

First, I would like to express my very real appreciation and that of the entire Bureau for your personal interest and the committee's interest in this whole problem. I think that you have been fully aware of the problem, that you have tried to help us, and have helped us very materially.

I am only speaking of the 5 years I have been Director, not because that is the only period in which there has been progress made, but because it is the period of which I know most, but in that period we have increased the amount of money available for soil and moisture conservation—it is still pitifully low—but we have increased it to double what it was. It does not go as far as it did because today the costs are higher, but we are getting a little better job done.

Mr. JENSEN. How much money are you asking for for soil and moisture conservation for 1954?

Mr. CLAWSON. $2 million.

Mr. CLAWSON. Yes.

Mr. JENSEN. How many acres of land come under your jurisdiction?

Mr. CLAWSON. 185 million acres.

Mr. JENSEN. How much does that amount to per acre?

Mr. BEIRNE. A little over a cent an acre.

Mr. JENSEN. You are asking for $2 million, and you have how much land?

Mr. CLAWSON. 185 million acres. That is a little over a cent an acre.

Mr. JENSEN. That is right, a little over 1 cent an acre.

Mr. CLAWSON. Yes; it is pitifully small, but a little more than double what we got when I came into the Bureau as Director. I think it has been the interest of you personally as well as the interest of the other members of the committee that has helped us to receive some increase.

Mr. JENSEN. It must be because on several occasions this committee has seen fit to go above the budget request for soil and moisture conservation, not only in the Bureau of Land Management, but also in the Indian Service.

HALOGETEN CONTROL PROGRAM

Mr. CLAWSON. Now, closely related to the soil and moisture effort is this program of halogeten control.

Now, halogeton is a poisonous weed, and if it is allowed to go unchecked it creates a very serious problem for the livestock industry. Under that program we are reseeding substantial areas in order to get grass to grow in those areas, which is a type of conservation. We will reduce erosion in those areas, and at the same time increase the productivity, and that amount is roughly $1,500,000 in our budget. that program is entirely new within the past 5 years.

Also in our program is a much better program of administration of these lands in order to prevent overgrazing, to prevent unseasonal grazing, and to prevent trespasses on the lands. The committee has increased our appropriation, and as a result of that we have been able to increase our manpower, and also reduce the trespassing on the land.

PROBLEMS CREATED BY TRESPASS

Mr. JENSEN. What do you mean by trespasses?

Mr. CLAWSON. I mean this, if we were to license you to run 100 head of livestock from May 1 to October 1, and you turned out 150 head or 200 head and you turned them out before May 1 or ran them later than October 1 it would be trespassing. You can run either more numbers or you can run them in the improper season. Trespass in grazing is almost always overgrazing. Suppose we license you to graze 100 head of cattle and you turn out 100 head at the proper season, and suppose that because of lack of water on the range and proper practice on your part those cattle concentrate in one end of the grazing area, but do not graze the other end hardly at all, you have no grazing on one part of the area, and overgrazing on the other. You have that sort of thing happen. It is true that most operators are alert to make the best possible use of the public range, the same as they do of their own, but not all operators. We have to have a certain amount of manpower to supervise that sort of work, and the number of men that has been available for grazing administration has materially increased in the last 3 or 4 years. So, for all of those reasons I want to say again we are deeply appreciative of the work of this committee in helping us to make that possible.

SOIL AND MOISTURE CONSERVATION PROGRAM

QUALIFICATIONS OF SOIL CONSERVATIONISTS

Mr. JENSEN. Who is in charge of the soil and moisture conservation program in your Department?

Mr. CLAWSON. A man named Pierson.

Mr. JENSEN. What is his background?

Mr. CLAWSON. He is a forester by training. He has been in soil-conservation work for many years.

Mr. JENSEN. In what capacity?

Mr. CLAWSON. He has been with us approximately 3 years.

Mr. JENSEN. Where did he get his training in soil conservation?

Mr. KERR. In Idaho. He was an extension forester with the University of Idaho.

Mr. JENSEN. He is a forester. His service was in forestry previously instead of soil conservation?

Mr. KERR. His education would indicate that he actually has had quite a bit of work in soil and moisture conservation work.

Mr. JENSEN. If I may say it, I think your Department needs several soil conservationists who are skilled in the art of conserving the soil. I think there is where you have failed if you have failed any place, Mr. Clawson. I am not saying that you have, because I know that you are a very sincere man, and you want to do a good job. I think you have been doing a good job, but I do not believe you have men in your Department who really understand just how this soil-conservation problem on your public domain should be handled.

COOPERATION WITH SOIL CONSERVATION SERVICE

Now, I hope that you will cooperate fully with the Soil Conservation Service, which I know you have been doing, and ask them if they do not have a couple of men, a man or two at least, that they can turn over to your Department. I have no one in mind at all, but I think that they can turn over to the Bureau of Land Management some men who can go in and really do the job of leading the way in this great problem that you have in the conservation of the soil on 185 million acres of the public domain.

Mr. CLAWSON. Well, the second thing I wanted to say in response to your general inquiry earlier was that many of our people came to us from the Soil Conservation Service.

Mr. JENSEN. This is not a slap at the man that is doing the job now, because I do not know him; he may be a good man, but I doubt if you have nearly enough help.

Mr. CLAWSON. I wanted to say, sir, in the first place that many of the top people we have with us now, Mr. Pierson, and some of the other top people in our soil-conservation program came to us from the Soil Conservation Service at the time that the work on public lands was transferred to the Department of the Interior in 1940, so most of our older men came to us by way of some experience in the Soil Conservation Service. Our younger men we have recruited from the colleges and elsewhere.

As a matter of policy we work very closely with the Soil Conservation Service and with the soil conservation districts. I am not going into detail there, as I do not want to take your time. However, as a matter of policy, we work closely with the districts wherever they are organized.

For instance, in Arizona the soil conservation districts are not allowed, under State law to operate outside of croplands. They are not allowed to operate on rangelands. In some other Western States they do not include much rangeland, but if so they are primarily interested in the cropland, so that in many instances it is not possible to operate closely with the soil conservation districts, but where it is possible we do so.

DESIRABILITY OF TRANSFER OF PROGRAM TO SOIL CONSERVATION SERVICE

Mr. JENSEN. That very thing I know, and that is the reason why I am hoping that the day will soon come when the job of soil and moisture conservation on not only the private lands of our country, but all of the public domain, will be under the Soil Conservation Service. Then the responsibility will rest on their shoulders for the conservation of all of the soil on all of the lands of America, and we will really start getting the job done on soil and moisture conservation on our public domain and not before.

Mr. CLAWSON. As I said earlier I appreciate what you said before, that I do not have to make a final statement now.

Mr. JENSEN. Yes.

Mr. CLAWSON. The last point I wanted to make was this, that at one time the responsibility for soil and moisture conservation on the public lands was in the Soil Conservation Service. It was taken out in the reorganization in 1940. Now, there are good arguments in favor

of what you said, and there are some arguments on the other side.

Mr. JENSEN. All right; I want to hear them.

Mr. CLAWSON. And the most important one is this, that you must carefully coordinate your soil conservation program and what we call our management program, that is, the numbers of livestock to be grazed, the season of grazing, your fences and all of the rest of it because if you do not carefully coordinate them you may undo through management what you try to gain through soil conservation.

Mr. JENSEN. Mr. Clawson, there is no reason in the world why the Soil Conservation Service and the Bureau of Land Management cannot carefully coordinate the job of conserving the soil.

Mr. CLAWSON. Surely, and it may be that it can be more readily done in 1 agency than 2. There is no question of the desirability of a much larger soil conservation program. The only question is whether that administration should be placed in a special conservation agency or in the agency which administers the land for other purposes.

Mr. JENSEN. I know this, and I am sure you know it as does everybody who takes an interest in soil conservation. Because of the great job which has been done by the Soil Conservation Service over the past 17 years, it has proven to all of us that they know how to conserve the soil better than any other agency of the Government. Congress will be more willing to appropriate the necessary funds if they know that the Soil Conservation Service will have the responsibility of seeing to it that the soil on our public domain is conserved under their able management and leadership.

Now, the Soil Conservation Service is now and has been for several years, the most popular branch of the Department of Agriculture because of the very fact that they have not played politics in any way, shape, or form with the conservation of our soil.

They have soil conservation in their blood, not only those who are paid for the job of conserving the soil, but the district commissioners who are not paid. They do this job of helping their neighbors to conserve the soil on their farms because they have soil conservation in their blood and because they want to render a service to their country in this great job of conserving our soil on which the welfare of the Nation depends not only today, but tomorrow and for hundreds of years to come.

Now, the Soil Conservation Service has that reputation today, and that is why I say that the Congress, knowing of the ability of the Soil Conservation Service to do this job, will, without doubt, appropriate more money for the conservation of our soil if that responsibility is given to that organization, the Soil Conservation Service. Certainly it can be coordinated, and the job can be carried on between the Bureau of Land Management and the Soil Conservation Service in such a way that we will go forward on this job and not go backward like we have been doing on the soil and moisture conservation problem on our public domain ever since the beginning of time in this Nation.

I am so dead serious about this thing that I hope you will really go into it with every ounce of energy and power and knowledge that you have as Director of the Bureau of Land Management to see to it that we do go much faster and work out some way of doing it and get the job done.

GRAZING LANDS—REVENUES AND APPROPRIATIONS

Will you put a statement in the record showing the total acreage that you lease to cattlemen and sheepmen, the total receipts, and the amount appropriated for management of grazing lands for the past 10 years?

Mr. Clawson. Yes, sir.

(The matter referred to is as follows:)

Grazing receipts, appropriations, and acreage under administration

	Receipts	Appropriations	Acres under administration	
			Grazing districts [1]	Leased lands
1943	980,314	839,300	141,915,841	38,007,690
1944	1,015,818	978,700	142,205,002	37,567,096
1945	996,330	1,017,740	145,777,974	37,572,331
1946	960,395	1,121,470	148,129,735	37,240,701
1947	1,040,736	550,000	150,000,000	37,183,390
1948	1,408,333	715,595	151,707,449	36,152,940
1949	1,230,844	891,705	148,461,278	36,167,565
1950	1,525,991	1,001,384	149,044,840	35,533,284
1951	1,683,392	1,110,800	160,668,987	28,363,291
1952	1,979,511	1,453,176	160,075,550	27,902,887

[1] Includes land administered under agreement with other Federal agencies and non-Federal land leased under the Pierce Act (43 U. S. C. 315m).

FORESTRY

Mr. Jensen. We will put the table on page 20 of the justifications into the record.

(The matter referred to follows:)

	Appropriated 1953	Decreases	Base 1954	Estimate 1954	Increases
(a) O. and C. lands	$1,282,700		$1,282,700	$1,475,000	$192,300
(b) Other lands	1,122,300	$1,400	1,120,900	1,275,000	154,100
Total	2,405,000	1,400	2,403,600	2,750,000	346,400
(a) O. and C. lands:					
1. Forest management	894,200		894,200	894,200	
2. Forest protection	308,500		308,500	500,800	192,300
3. Forest development	80,000		80,000	80,000	
Total	1,282,700		1,282,700	1,475,000	192,300

Mr. Jensen. I would like also to have a table put in the record showing what has been done with respect to revenues from controverted lands which are being held in escrow. Can you do that?

Mr. Clawson. Yes.

(The matter referred to follows:)

According to information received from the Department of Agriculture, receipts from the controverted lands through June 30, 1951, amounted to $4,611,351.44. The annual report of the Forest Service indicates that the receipts from the controverted lands during fiscal year 1952 amounted to $1,448,975. These funds are held by the Department of Agriculture.

The Bureau of Land Management is holding in escrow the sum of $39,141.36 from sales on the controverted lands, pending a determination of jurisdiction and manner of distributing funds.

Mr. JENSEN. Does the Federal Government pay the full cost to the State for fire protection on the O. and C. and CMWR lands under its contract with the State of Oregon and, if so, why, in view of the large cut of revenue which the counties get? Also, why should not these costs be taken out of the revenue before distribution to the counties and the Federal Government is made?

Mr. CLAWSON. Well, we do pay to the State the full cost of fire protection on the lands protected by the State. There is a small part of the O. and C. lands that is protected through the Forestry Service, and we pay to them the cost for that land For the land which the State protects we pay the full cost.

I am sure the committee is fully aware of the fact that the distribution of the receipts and these costs are strictly in accordance with the law and, moreover, that we have suggested from time to time proposed changes in the law. The present law provides that the State of Oregon gets nothing as a State, but the counties in the O. and C. area get up to 75 percent of the receipts from the sale of timber on the O. and C. lands. On the Coos Bay wagon road lands, the counties get tax-equivalent payments thereon, and thus far the tax equivalent has amounted to less than 20 percent of the receipts. There is a long, complicated history of these O. and C. revenues, and until approximately 19 months ago the counties were only getting 50 percent of the receipts, and the other 25 percent that they are now getting was to go into a special fund. However, in the current fiscal year, as a part of the appropriation, the counties are getting 50 percent and the balance of the other 25 percent, out of which the costs of the roads will be paid. If there is any remainder, the counties will get that. In other words, the counties are paying the costs of the roads out of their 75 percent. The counties are not paying any share of the fire-protection cost or the cost of administration.

I am not sure I have answered all of your question, but that is the general situation.

As I have said, we have recommended legislation to change that. As It stands now, those things are strictly in accord with present law.

Mr. JENSEN. I have just 1 or 2 other questions.

Will you explain the reason for the increase in State contracts from 13 cents per acre in last year's estimate to 21 cents in this year's estimate?

Mr. CLAWSON. Well, in the first place, the cost of the fire fighting has been increasing like many other costs. It costs you more for equipment and for labor and the like. In the second place, I think the standards of fire protection have been increased as the timber has grown more valuable. Increased efforts have been made to protect the timber, even though that might involve additional costs. Now, the costs that are allowed or that we submitted estimates for are based strictly upon costs incurred but with a considerable lag. That is, we have submitted each year the costs incurred by the counties or the State or the Forest Service in a previous year. The costs submitted here for 1954 are actually based largely upon calendar year 1951 fire season. The reason for that is that these estimates were put together and cleared the Bureau of the Budget in the fall of 1952, and at that time the latest annual costs they had available

were for the calendar year 1951. So that each year our estimates are based upon an actual year's experience but some months previous. So these costs are based upon calendar year 1951, which was a rather serious fire year.

LEGISLATION ON O. AND C. LANDS

Mr. JENSEN. What legislation is pending or contemplated with respect to the distribution of receipts for timber on O. and C. and Coos Bay area land?

Mr. CLAWSON. I think none is actually pending at the moment. In the last Congress, both Congressman Harris Ellsworth and Senator Guy Cordon introduced bills which would have reduced the share to the counties from 75 to 50 percent. The Department in reporting on those bills proposed a somewhat different formula, namely, that the various roads, fire, and administrative costs be deducted first and then the counties be given a 50 percent share. So far as I recall, none of that legislation has been introduced in this Congress, but I assume it will be.

Mr. JENSEN. Are there any new developments with respect to single management of the O. and C. controverted lands by either the Forest Service or the Bureau of Land Management?

Mr. CLAWSON. Well, the earlier legislation which I mentioned a moment ago has been introduced by the two same Members of Congress as this session. In addition, there is a suit pending by one of the Oregon counties which would try to compel the Secretary of the Interior to pay these controverted sums as though they were O. and C. lands, which, of course, would involve settlement of the issue. However, that suit has not been brought up for actual trial, and I am not certain when it will be.

DIRECT FIRE-PROTECTION COSTS

Mr. JENSEN. Now, with reference to the change to contract protection from direct protection by the Bureau of Land Management, will costs increase or decrease, and also, should not these changes reduce fire-protection costs under the regular fire-protection item on page 41 of the justifications?

Mr. CLAWSON. I believe that is page BLM–28. Well, I think we are not proposing to change from contract to direct suppression in any place.

Mr. JENSEN. Well, herei s what it says in a paragraph on page 28:

> In 1954, contract protection will be extended to an additional 213,000 acres of land, chiefly in Idaho, Oregon, and New Mexico. In New Mexico, 30,000 acres of commercial forest and woodland will be brought under contract protection for the first time. Formerly these lands were under a cooperative protection agreement with the Forest Service under which the Bureau of Land Management paid presuppression costs at 1.5 cents per acre plus actual suppression costs. The Forest Service desires to furnish full protection under contract. Additional acreage is added in Idaho, where 120,000 acres will be placed under contract. In Oregon, 63,000 acres of forest land in the Klamath area formerly protected by Bureau personnel will be brought under protection by contract.

Now, what does that mean, in your own words?

Mr. CLAWSON. Well, it means in some areas fire protection will be extended to land that had previously either had no protection or very sketchy protection. In the New Mexico area we are contracting with

the Forest Service at a flat pre-agreed-upon sum rather than on a reimbursement-of-cost basis. Whether it will be higher or lower we cannot say in advance. However, over a period of time, it should average out about the same. The present arrangement might bring us very high costs in one year and very low costs in another year, depending upon the actual incidence of fire, but under contract, it should average out. It might be higher or lower, as the case might be.

SOIL CONSERVATION COSTS

Mr. NORRELL. Before I get into the questions which I have here, which I want to ask, let me say that I am interested in soil conservation, which was discussed quite a bit previously.

Is it not true that the main reason why you have not done more in this field is because of the impossible situation existing regarding funds?

Mr. CLAWSON. That is very largely true.

Mr. NORRELL. Now, the truth is that we have over 450 million acres in the public domain over which you have jurisdiction; is that right?

Mr. CLAWSON. Well, we administer about 185 million of that 450 million.

Mr. NORRELL. You have a total acreage of how much?

Mr. CLAWSON. Counting the national-forest lands and the Indian lands and all the rest it is around 450 million or 460 million; that is correct.

Mr. NORRELL. If you could rehabilitate a lot of that soil it would take an ocean of money, would it not?

Mr. CLAWSON. It would take a substantial sum.

Mr. NORRELL. I want to say I am very sympathetic to soil conservation, but I think it would be a grave mistake to try to do much in the field of soil conservation on the public domain because of the fact that it takes so much money and you do not have it and you cannot get it.

I mean by that that we are now, under President Truman's budget, out of line by about $10 billion, not covering any new fields which we might assume or enlarge.

At the same time, my Republican brothers are trying to balance the budget and to comply with a campaign pledge to reduce taxes. I do not know how you can reduce taxes and add new expenditures of money to a budget which is already $10 billion out of line, if you want to balance it up.

We do have a lot of interest in soil conservation, nevertheless. I think it is one of the greatest things that the Roosevelt administration undertook. That is true of soil conservation and rural electrification.

Mr. CLAWSON. Well, Congressman, I fully sympathize with your viewpoint. The thing we have been trying to say is that these lands do produce revenues. They could be made to produce a lot more revenues.

I am not at all sure that the revenues which are produced could not be used in perhaps somewhat wiser ways than they are at the present time. If I remember correctly, you yourself raised some questions along that line last year.

Now, it is not only a question of the total revenues, which the chairman brought out this morning, but it is a question of the use made of them. We use them, of course, strictly under law.

But let me say this: For instance, to be specific, a very substantial amount of money goes into the reclamation fund for the reclamation program, which is taken from these public lands. Now, as a matter of fact, over the years there has been almost as much money going into the reclamation fund from the public lands as has gone into it from the reclamation program itself, in terms of power revenues and repayments. If we would take some of the money that comes off these lands and plow it back into further productivity of the lands it would be possible to improve their productivity without adding to the total national budget.

Mr. NORRELL. I always have my fingers crossed when I think of any Federal project being self-sustaining. I have not seen any yet. There is none in reclamation. There is none in flood control that I know anything about.

Mr. CLAWSON. That is right.

Mr. NORRELL. There is always a deficit. Maybe there are exceptions here and there. I would not be too sure that there are not, but I am saying I do not know of any.

AMOUNT OF LAND IN FEDERAL OWNERSHIP

Now, there is one general question I have to ask before I get into the other questions here. There has been a lot said in the press lately about turning back to the several States as much of the Federal activities as can be turned back to them. I have not been one who has been talking either way. What I am going to do now is to try to find out a little information. I guess, after all, a Congressman ought to have a little information once in awhile.

I notice in your statement here on page 3 you say that the Federal ownership in the States today stands at about 456 million acres of land. Is there any other federally owned land which is administered by any of the other agencies to which this amount should be added in order to ascertain the total overall acreage of land?

Mr. CLAWSON. Let me say first of all, Congressman, that the statistics and the information about Federal land are most confusing and inaccurate and difficult to interpret and to be positive of anything you say. We have a record in our Bureau of certain lands. Other agencies have records of other lands. Nowhere is there a simple comprehensive accurate record of the total.

Therefore, when you get into this field of talking about acreages of Federal land, you are dealing at the best in approximations and in estimates. I think that ought to be understood from the beginning, that no one can speak with complete certainty and complete accuracy,

Mr. NORRELL. You mean there is not anybody who can tell us today the total federally owned land in this Nation?

Mr. CLAWSON. That is correct. Not only as to the total, but if you say:

> Here is a particular legal subdivision, a section in my county or in your county or what not. Does the Federal Government own it, or does it not?

there is no one place you can find that out. The records are scattered in a wide variety of places.

We have this experience repeatedly. Someone goes to the county recorder's office, and he finds that according to the county recorder's records a particular section or quarter section belongs to the United States Government. He writes to us and applies for an oil-and-gas lease. We say:

> We are very sorry. We do not have any record of that. We have called every agency we can think of. We cannot find out. Try to check locally which Federal agency administers it, and we will search some more.

We have written letters like that repeatedly.

I do not want to overemphasize this, and yet what I am going to say in a moment follows so much from this: Any statements made about this are estimates and approximations. The data are confusing in the extreme.

Now, to the best of my knowledge the 456 million acres is all that the Federal Government owns within the continental United States.

Mr. NORRELL. That is the total?

Mr. CLAWSON. That is the total. It includes among that acreage approximately 54 million acres which is Indian land, which, from some points of view, is not Federal land. It belongs to the Indians rather than the Federal Government.

Mr. NORRELL. Of that total that you guess the Federal Government owns, then, you have jurisdiction over you guess again how much?

Mr. CLAWSON. 185 million I guess again.

Now, in all of this, mind you, we have been talking now about the States, excluding Alaska from all of this, which introduces, of course, still another factor into it.

Let me say further, Congressman, that there has been a great deal of talk in the press and in various speeches about the great increase in Federal ownership in the last 20 years, let us say. To the best of our knowledge that increase has not occurred.

I do not mean in the least to accuse the people who have said it of inaccuracy or anything of the sort. One of the unfortunate things that happened was that in 1937 an organization known as the Federal Real Estate Board, which was a joint congressional-executive deal, came up with some estimates of the Federal ownership which were obtained from the various agencies, but they used some definitions which resulted in some figures which did not mean what they purported to mean. Therefore, you have had since that time what seems to be a large increase in acreage, when actually much of it was spurious.

Between that survey in 1937 and 1945 there seemed to be a 71-million-acre increase in Federal ownership, of which perhaps 20 million acres actually took place and the other 50 million acres was a faulty statistic in the 1937 figures.

I do not know how far you want to get into this thing, but it is a very involved and a complicated thing because of the fact that no one really knows.

Mr. NORRELL. That is what I wanted to know. We do not actually know?

Mr. CLAWSON. That is right.

LAND IN ALASKA

Mr. NORRELL. I believe you stated in your statement this morning something about 10 percent of the land you are operating. What did you say about the State-owned land?

Mr. CLAWSON. What I said or meant to say was this: There are in the United States about 1,985,000,000 acres of land surface, excluding water surface, all within the boundaries of the continental United States. If you put that over the 185 million acres that we administer, you get roughly 10 percent.

Mr. NORRELL. Then you would get 10 percent.

Mr. CLAWSON. You would get roughly 10 percent; not quite 10 percent.

Mr. NORRELL. That is good.

Mr. CLAWSON. Yes.

Mr. NORRELL. Of what you have, do I understand you to say that 80 percent of it is in Alaska?

Mr. CLAWSON. No. We have 10 percent of the continental United States. In Alaska 80 percent of the total land area is under the jurisdiction of the Bureau of Land Management.

Mr. NORRELL. How many of these acres which constitute 185 million would be in Alaska?

Mr. CLAWSON. That is all in the States. The 185 million is all in the States. Added to that is 290 million in Alaska.

Mr. NORRELL. When you add Alaska you have the total?

Mr. CLAWSON. Yes.

Mr. NORRELL. All right.

Mr. CLAWSON. In general I have stuck to comparisons in the States, leaving Alaska out.

TOTAL CASH RECEIPTS OF THE BUREAU

Mr. NORRELL. Now, in the explanations on page 4 you give a table which shows the cash receipts covered into the Treasury in 1951 to and including 1954. I assume that is all of the money you have taken in from any source.

Mr. CLAWSON. I think so. That is correct.

Mr. BEIRNE. There may be a difference of $1,000 or $2,000 from such things as telephone coin boxes and so forth, which is covered into miscellaneous receipts, which is not a part of our regular operations.

Mr. NORRELL. When we are dealing with the natural resources this would be it?

Mr. BEIRNE. Yes, sir.

Mr. CLAWSON. Yes.

DISTRIBUTION OF RECEIPTS

Mr. NORRELL. On page 5 you give a breakdown of the distribution of the receipts to States and counties. For instance, in 1952, you collected a total amount from all sources of $64,518,396. That was in the year 1952.

Now, in the year 1952 you disbursed to the States and counties $22,870,967.90. That is correct, is it not?

Mr. CLAWSON. Yes, sir.

Mr. NORRELL. In 1952 what was the total appropriation you received from this committee?

Mr. CLAWSON. In 1952 it was $10,993,000.

Mr. NORRELL. Then you gave to the States $22,870,967.90, and your total appropriations were $10,993,000, so you expended $10,993,000 in appropriated funds. Your income was $64 million plus. Where did the rest of that money go?

Mr. CLAWSON. We would be glad to submit a statement on that, Congressman. In general, of course, a substantial amount went into the reclamation fund. I cannot tell you the exact sum offhand, but just looking at those figures on page 4 I am sure it was between $20 million and $25 million that went into the reclamation fund.

Mr. NORRELL. I will tell you what I want you to do. I have had a lot of trouble with this in years gone by. That has not been caused by you or by me or any other individual, but it has been caused, I guess, by a lack of my knowledge of the laws under which the funds are disbursed.

I should like you to take those receipts which you show on page 4, which is short and comprehensive, and then in showing the disbursements I should first of all like you to show what you turned over to the States and counties, which is $22,870,000 plus. Then I would like you to show where the other moneys went, and when you turn something over to the Treasury, if there is a law requiring the Treasury to disburse that money to some specific activity I would like you to show that that money was disbursed under act so-and-so to so-and-so.

Mr. CLAWSON. Yes.

Mr. NORRELL. What I am trying to do is this: Much is being said about our public domain. Here is our income, we will say, for 1952. That looks good. But as a taxpayer from New York or Arkansas or from Idaho I want to know where every dime of this money went. If it went from you to the Treasury and then under some law from the Treasury Department to so-and-so, I would like you to show that.

I am not against any act of the Congress. I simply want to be able to look at the table of figures, and I should like to have it as brief as you can make it, so that I can tell where the money goes ultimately.

Mr. CLAWSON. We would be happy to submit that, Congressman.

(The matter referred to is as follows:)

AUTHORITIES FOR DISTRIBUTION TO THE RECLAMATION FUND AND STATES AND COUNTIES OF RECEIPTS COLLECTED BY BUREAU OF LAND MANAGEMENT

Type of receipts and distribution

Mineral Leasing Act: 52½ percent to reclamation fund; 37½ percent for payment to States; 10 percent to general fund. Authority: Act, February 25, 1920 (30 U. S. C. 191), as amended.

Rents and royalties from potash and potassium deposits: 52½ percent to reclamation fund; 37½ percent for payment to States; 10 percent to the general fund. Authority: Act, February 7, 1927 (30 U. S. C. 191: 285), as amended.

Receipts from grazing:

Section 3 permits: 12½ percent of the grazing fee to States; 87½ percent to the general fund. The specific range-improvement fee which is charged and covered into the range-improvement fund is available when appropriated by Congress.

Section 15 leases: 50 percent to States; 25 percent to range-improvement fund; 25 percent to general fund.

Authority: Taylor Grazing Act, 43 U. S. C. 315 b, i, m; 61 Stat. 790, 315 J; 48 U. S. C. 471 H.

Grazing, Indian ceded lands: 33⅓ percent of the fees from each grazing district on Indian lands ceded to the United States is paid to the States; 66⅔ percent to the Indians. Authority: 43 U. S. C. 315 j, as amended August 6, 1947.

Rent from leased grazing lands: Paid to the lessor (usually States or counties) limited to receipts. Authority, Pierce Act (43 U. S. C. 315 M-4).

Sale of standing timber, Alaska: Receipts from timber cut from sections reserved for educational purposes go to the Territory, all other sales go to the general fund. Authority: 48 U. S. C. 353, 421; 38 Stat. 1214; 53 Stat. 1243.

Sale of timber, O. and C. lands: 50 percent to counties; 25 percent to reimburse Treasury of United States. 25 percent to Treasury to reimburse administration costs. After all reimbursable costs to the Treasury have been paid the counties receive 75 percent and the Treasury receives 25 percent to reimburse costs of administration. Authority: 50 Stat. 874; 39 Stat. 218.

Sale of Timber, Coos Bay Wagon Road grant lands: The counties receive tax equivalent based on appraisal similar to private lands up to 75 percent of receipts. Balance to general fund. Authority: 53 Stat. 753–754.

Sale of public land and materials (including public domain timber):

In reclamation States: 95 percent to reclamation fund; 5 percent to the States.

In other States: 95 percent to general fund; 5 percent to the States.

Authority: 31 U. S. C. 711 (17); 43 U. S. C. 391; 50 U. S. C. 1601, Act, July 31, 1947 (Public Law 291).

Payment to Oklahoma: 37½ percent of oil and gas royalties from south half of the Red River is paid to the State in lieu of State and local taxes on Kiowa, Comanche, and Apache tribal funds. Authority: 42 Stat. 1448; 44 Stat. 740.

Mr. NORRELL. I would like you to send a carbon copy of this table which you turn over to the clerk to me, if you will.

Mr. CLAWSON. May I say one other thing? The biggest single item, next to and possibly in excess of that which is turned over to the States and counties, will be that which goes into the reclamation fund. Now, that which goes into the reclamation fund, as I understand it, is not automatically made available for reclamation but is subject to appropriation.

Mr. NORRELL. I want that shown.

Mr. CLAWSON. Yes. In other words, if it were not appropriated it would remain presumably in the reclamation fund without being available for general expenditure, but it would not be spent for that purpose.

We will show it separately, so that you can make whatever interpretation of it you wish.

Mr. NORRELL. You can put it down there and, as you say, I can interpret it the way I want to.

Mr. CLAWSON. We would be happy to.

Mr. NORRELL. I am interested in trying to determine where the money goes or where it can go under the existing law, if they receive the appropriation.

Mr. CLAWSON. Yes.

Mr. NORRELL. Frankly, I think the States in which this land is located are entitled to a great deal of consideration, because without some income from this land they could not have a government. I know that.

But in the other States where they do not have much of the land, it may be that we will say:

"Well, there is nothing left anyway after the States and counties and cities get what they are entitled to under the law, so we will not lose anything. Let us give it to them."

I do not know what I will do. That is a bridge I will cross when I get to it. However, I would like to have that information.

We will insert in the record at this point the table on page 31 of your justifications.

(The matter referred to follows:)

Appropriated 1953	$963,000
Decrease	900
Base 1954	962,100
Estimate 1954	1,000,000
Increase	37,900

The decrease of $900 from the 1953 appropriation is the amount included for building rental that will hereafter be financed by General Service Administration.

Definite land boundaries and subdivisions having legal status are necessary to the establishment of ownership or transfer of title to public lands and the resources thereon. The responsibility for determining these legal boundaries and subdivisions is placed by law upon the Bureau of Land Management. As of June 30, 1952, there were more than 30 million acres of original surveys still to be made and more than 43 million acres requiring resurveys.

The following tabulation shows the amount of surveys and resurveys completed in the field for 1949–52:

Fiscal year	Surveys (acres)	Resurveys (acres)	Total (acres)	Appropriations
1949	143,548	338,818	482,366	$525,000
1950	138,290	449,748	588,038	725,450
1951	125,405	410,987	536,392	843,000
1952	190,086	514,220	704,306	734,800
4-year average	149,332	428,443	577,775	707,063

The foregoing relates to surveys and resurveys measurable on an area basis. In addition the program also involves such work as mineral segregation surveys, boundary surveys, and the subdivision of sections into tracts ranging from 1¼ to 5 acres. Work of this type is normally of first priority.

Mr. NORRELL. Will you make any comment on that which you so desire at this time.

Mr. CLAWSON. Well, this activity beginning on page 31 is the cadastral survey program of the Bureau. Cadastral surveys are those which establish the legal boundaries and legal points for subdivision. There is roughly 100 million acres of land in the West that has not been surveyed. Of course, practically all of Alaska is still unsurveyed.

In addition to areas which have never been surveyed, many areas which were originally surveyed were such that the surveys were rather poor in some cases, and in some cases they were fraudulently or incompetently made, and the markings are rather poor and it is necessary in a good many instances to resurvey those areas.

The lack of surveys is hindering private individuals from obtaining land, and is hindering the States from obtaining some of the land to which they are entitled. It is impeding oil and gas and other development, which involves use of the land, even though the title remains in the Federal Government. All in all the lack of surveys is a very serious obstacle in the use or disposition of these lands.

The acreage which has been surveyed in recent years is quite small. Unless it can be very materially stepped up the survey of the remaining areas is going to take 100 years or more. The increase requested there is a very modest one for next year.

Mr. NORRELL. When you insert that table, you might put in there the appropriations received for this activity during each year from 1949 through 1952.

Mr. CLAWSON. We will be glad to do that.

Mr. NORRELL. How do you get the figures of 30 million acres of original surveys still to be made and more than 43 million acres requiring resurveying? How do you know that?

Mr. CLAWSON. Well, those are estimates based upon the areas that are surveyed and estimations from maps as to the areas yet unsurveyed. You will not know the exact acreage until the survey is made, but you can make reasonably close estimates in advance of surveying.

STATE CONTRIBUTION TO SOIL AND MOISTURE CONSERVATION PROGRAM

Mr. NORRELL. How much will the Federal Government and the Soil Conservation Districts each be putting into the 12 pilot programs on soil conservation, as shown commencing on page 35 of the specifications.

Mr. CLAWSON. Well, different amounts, sir. In general the planning of a program in each of those districts has been done jointly by the directors of the soil-conservation district who are elected by the farmers and ranchers in the district and by the various Federal agencies that have administration over some Federal land in there.

The program on the privately owned lands is carried out by the private landowners and users.

The programs on the Federal land are carried out by the Federal agencies, but at least in our case with substantial contributions of funds from private users. As a matter of fact, on the soil-conservation program the contributions run in quite substantial amounts from private users.

Mr. NORRELL. We will insert in the record at this point the table which is shown on page 37 of the justifications.

Mr. CLAWSON. We would be glad to, sir.

(The matter referred to follows:)

Area to receive soil and moisture treatment, fiscal year 1954

River basin	Area of land severely to critically eroded	Estimated area benefited by 1954 program	Appropriation requested
Columbia	11,368,000	98,000	$230,000
Colorado	26,060,000	285,000	690,000
Great Basin	38,580,000	145,000	345,000
Missouri	8,647,000	120,000	305,000
Rio Grande (includes inland and Mexico)	8,216,000	120,000	310,000
Central California	1,754,000	20,000	45,000
Southern California	684,000	8,000	15,000
Coastal of Oregon	192,000	1,000	15,000
Arkansas-White	471,000	3,000	8,000
Total	95,972,000	800,000	1,963,000
Program direction			37,000
Grand total	95,972,000	800,000	2,000,000

Mr. NORRELL. Please add the funds requested for 1954 to that, as you did for the preceding item.

Mr. CLAWSON. All right.

Mr. NORRELL. Showing the breakdown of where the money will go.

Mr. CLAWSON. Yes, sir. We can pull it right off those following pages and put it right on.

AMOUNTS PROGRAMED FOR RIVER BASIN PROJECTS

Mr. NORRELL. I notice there that $230,000 is for the Columbia River Basin, $690,000 on the Colorado River Basin, and $345,000 on the Great Basin. Is that the Great River Basin?

Mr. CLAWSON. That is the Great Basin, which includes much of Nevada, parts of Utah and surrounding areas. It is that area which has no drainage to the sea. It is the internal drainage of Salt Lake and those other inland lakes.

Mr. NORRELL. Going on down, to use this as an illustration, I notice the last item there is for the Arkansas-White, Upper Arkansas Basin. I guess that is in the State of Colorado?

Mr. CLAWSON. Yes.

Mr. NORRELL. What can you do with $8,000 in a situation like that?

Mr. CLAWSON. I do not know.

Mr. NORRELL. Is that enough money to do any good at all, the amount which you itemize here on these different river basins?

Mr. CLAWSON. Many of our specific projects are quite small, Congressman, where we build check dams or detention dams or other types of activities, many of which cost $2,000 or $3,000 each. In other words, we do not go in for large-scale dams and structures. There are some exceptions to that.

Mr. NORRELL. You have there an item for "Central California, Sacramento River." You have a sum of $45,000.

Mr. CLAWSON. Yes.

Mr. NORRELL. How can you do any soil-conservation work for that at all? I do not understand it.

Mr. CLAWSON. Of course, the acreages of public land which are left are relatively small, and these would be relatively small programs on those particular lands that are left in Federal ownership.

We would be glad to submit to you a more detailed statement of what is proposed to be done in each of those areas, if you would like to have it.

Mr. NORRELL. Anything you can add to the record to show we are getting any good out of the money we are spending on that would be good. Soil conservation seems to me to be something where you either have to have enough, or maybe you are wasting what you are using.

(The matter referred to follows:)

STATEMENT CONCERNING SOIL AND MOISTURE CONSERVATION PROGRAM ESTIMATES, FISCAL YEAR 1954

Central California (Sacramento River), $45,000.—The funds requested for this area will serve to initiate a program of soil conservation on scattered public-domain lands in the Sacramento River drainage, including the Pit River plot project. A large share of this work will be done in cooperation with soil conservation districts. The Pit River project in particular is being developed in cooperation with the State soil conservation district to serve as a pattern for coordinating conservation activities.

Southern California, $15,000.—These funds will serve to continue soil-conservation work in cooperation with range users on scattered public lands. Plans are

being developed to accelerate this program in cooperation with the State soil conservation districts. Action on this was started last year.

Coastal of Oregon, $15,000.—This work involves the control of sand dunes near the mouth of the Siuslaw River in cooperation with the city of Florence, the State soil conservation district and the Soil Conservation Service. Progress on this program is scheduled in accordance with the ability of the Soil Conservation Service nursery to produce plants adapted to sand-dune control work. Progress in control is influenced also by the necessity of attacking the problem in various scheduled steps which cannot be superseded by each other.

Arkansas-White, $8,000.—The program involves the application of conservation measures on the public lands in the Upper Arkansas River Basin in Colorado. The funds allocated to this project will permit a start on the action program in part of this basin. The work will be done in cooperation with other conservation agencies both local and Federal.

Mr. CLAWSON. Let me point out the fact that some of this is on the Upper Arkansas. It may be in the same grazing district as some of that, for instance, which is on the Rio Grande or on the Colorado. In other words, it lies near the headwaters. The fact that it is on the Arkansas, which we think of as associated with the State of Arkansas, does not mean it is there.

Mr. NORRELL. I mentioned the fact that I thought it was in Colorado.

Mr. CLAWSON. That is right. It shows here.

Mr. NORRELL. I know you could not do anything with $8,000 in Arkansas.

SQUAW BUTTE EXPERIMENT STATION

Mr. NORRELL. Let us consider the Squaw Butte Experiment Station, as shown on page 40 of the justifications.

What is the difference between the type of range research being done at the Squaw Butte Experiment Station and that done at the desert research station of the Forest Service near Milford in Utah?

Mr. CLAWSON. Well, there are somewhat different programs being carried on in part, because we are under somewhat different natural conditions. Actually, the character of the research carried on is quite similar at the two stations.

There are research stations under the Forest Service experiment stations and under the Bureau of Plant Industry in the Department of Agriculture and in cooperation with agricultural colleges scattered over various locations in the Western States. This station is very similar to any one of those.

This one happens to be located in Oregon under a particular set of climatic and natural conditions but carrying on work roughly similar to the others. Actually, there is always a difference in a specific project as compared to another specific project being carried on. Even though you may have research in reseeding methods or something of the sort at two or more stations, the fact that they are under somewhat different physical conditions tends to make them somewhat different types of research in each instance.

FIRE SUPPRESSION

Mr. NORRELL. Let us take up the fire suppression item. I notice you have a sizable increase this year over last year.

Mr. CLAWSON. That is in no small part a spurious increase, Mr. Congressman. By that I mean this: For the last 4 or 5 years we have had an appropriation of $150,000 for fire fighting. Each year we have

come before this committee for a supplemental amount to cover the actual costs that were incurred. That is what we were up here for a couple of weeks or so ago.

As we said then, the actual cost of fire fighting is absolutely unpredictable. You cannot tell what sort of climatic conditions you are going to get into and how severe the fire hazards are going to be and how many fires you are going to have.

The amount appropriated was for some years $50,000, and I think there was a supplemental in every year. It was steped up to $150,000, and there have been supplementals in the last 3 years on that. Now the Bureau of the Budget proposed to us last fall that we step it up to $250,000 in the hopes that we will not have to have supplemental appropriations every year. It is a hope that in an average or lighter-than-average fire year the $250,000 will cover the cost. If you get into a severe fire year the costs might easily still run in excess of the $250,000.

Actually, if we are going to have supplemental appropriations to cover the cost above the amount in the budget, this does not really represent a net increase. That is why I said to some extent it is a spurious item. It is in the hope that it will not be necessary now to have supplementals each year.

Mr. NORRELL. I do not see how you have so much trouble with fires there. I do not believe we have that much trouble in the South. I believe in Arkansas that the State has not expended all told as much money as you are asking here for fire control.

Mr. CLAWSON. Well, of course, the amount spent in some of the Western States varies greatly. The State of California is spending well in excess of $5 million a year for fire control, besides what the Federal agencies and counties and others are spending.

This is based upon actual costs, and we certainly do everything we possibly can to keep them to a minimum.

Now, in general, if you are going to attempt fire control in an area your costs will be lower if you can exercise prompt control of fires than if you let them get out of hand and then attempt to bring them under control later.

Mr. NORRELL. Could you venture a guess as to how much money the Department of Interior, through its several agencies, will expend for fire fighting in 1 year?

Mr. CLAWSON. No, I cannot venture such a guess. I do not have any record of any agencies outside of the Bureau of Land Management.

Mr. NORRELL. It would run into a tremendous sum of money.

Mr. CLAWSON. It would run into a substantial sum of money. If we did not have a fire hazard in our forested areas forestry would be infinitely more profitable than it is. That is one of our major problem.

In many of these western areas the fire hazard is increasing.

Mr. NORRELL. Why is that true?

Mr. CLAWSON. Largely because there are more people using these areas, more travel on the roads and highways and more camping out and more recreational use and all sorts of things. The number of fires is increasing. The acreages burned per fire have generally been decreasing, as better control is exercised over them.

Mr. NORRELL. Well, I hope you will get enough money so that you will not have to come back to us.

Several years ago over my objection you started a week-control program out there. Will you tell us what luck you have had?

Mr. CLAWSON. Well, I think we have had good success. Let me point out, though, that the present fiscal year ,1953, is only the second year we have had funds available.

Mr. NORRELL. I realize that is true.

Mr. CLAWSON. The funds we got in fiscal year 1952 did not come in until November. They were part of a supplemental appropriation and not part of the regular appropriation. Actually, we did not get a full year's use of them, or as early a use of those funds, as we would have gotten had they been part of the regular appropriation.

Under this weed-control program we have been carrying on two main activities. By far and away the largest and most important has been the reseeding to grass of areas infested with Halogeton or the imminent danger of becoming severely infested, particularly burned-over areas or areas where the natural plant cover had been destroyed or impaired, so that the Halogeton could get into those areas.

In addition to that we have been carrying on an operating program in certain areas to prevent the spread of Halogeton, particularly where you have small spot infestations some considerable distance from major infestations. It seems possible to spray them and hold the spread down. The spraying is relatively pretty expensive, and when you are through all you have accomplished is to stop the spread of the weed.

The reseeding when it is successful, as it generally is, not only stops the spread of the halogeton, but you provide some additional forage which is valuable and helpful as well.

Mr. NORRELL. I believe you estimate there are about 1 million acres infested now?

Mr. CLAWSON. Yes.

Mr. NORRELL. Whereas when the program was started you estimated it was about 640,000?

Mr. CLAWSON. That is right.

Mr. NORRELL. Is this increase going to continue, do you think?

Mr. CLAWSON. I think there is every likelihood that there will be further infestations. In spite of everything that can be done it will spread into some new areas. If there were no control program it would spread even faster than it is. I think it will spread in any event.

Mr. NORRELL. Is there any way you think we can ever get it off the public domain when there is not any effort being made to get it off the privately owned land?

Mr. CLAWSON. A great many efforts are being made to get it off the privately owned land. I think proportionately more money has been spent on the private land than on the public land.

Mr. NORRELL. Will you include in the record a statement of the activity of the private landowners?

Mr. CLAWSON. Yes.

(The matter referred to follows:)

LOCAL PARTICIPATION IN THE CONTROL OF HALOGETON

Complete data pertaining to the quantity of halogeton-control work on private lands by landowners are not available. Bureau field personnel in the conduct of day-to-day business have observed that the majority of livestock operators whose lands are located within the areas of infestation are waging a continuous attack on the weed near ranch headquarters, waterholes, and driveways.

Under the Halogeton Control Act of 1952, the United States Department of Agriculture was charged with the responsibility of halogeton control on State and private lands. In a report of a survey of the halogeton problem made late in the fall of 1952 by the Bureau of Entomology and Plant Quarantine, the results of the interviews with 198 livestock operators in areas of infestation are tabulated. Of this total 182 had had experience with halogeton, 167 were interested in control, 123 were willing to cooperate in a local control program, and 58 had suffered livestock losses.

State and local control committees have been organized in six of the Western States. County weed-control programs in 11 counties have been performing control work on private lands. The bulk of the infested private lands are interspersed with public land of which the checkerboarded railroad lands in northern Utah and Nevada are typical.

Where the Bureau has installed control projects on public lands, interested livestock operators have made substantial contributions. In the 1952 work season, which covered all of the 1952 and a portion of 1953 fiscal years' appropriations, private contributions to control work on public land totaled $240,000. Latest estimates show that funds expended by State and local agencies of direct benefit to public lands will total $161,000 for the 2 fiscal years. Of this total, States and counties will spend $119,000 and railroads $42,000. Defense establishments, such as supply depots, located in public land areas, will spend $77,000 in the same period for work on base lands, some of which will directly benefit adjacent public lands. The outlook for fiscal year 1954 indicates an increasing scale of contributions to control work on public lands and expenditures of other agencies:

Mr. CLAWSON. I said proportionately, because the acreage infested so far has been predominantly on the public land, so that the infestation on the privately owned land has not been as great as on the public land.

Mr. NORRELL. Have you got it cleared off of any publicly owned lands today?

Mr. CLAWSON. Yes; there are tracts where we have successfully reseeded and excluded the halogeton.

Mr. NORRELL. Will that land get reinfested in the years to come?

Mr. CLAWSON. I think not. We think not. We believe that if you get a good grass stand and manage it properly and do not overgraze it halogeton will not come back. I think we will have to wait and see what happens, but that is our best judgment as of the present time.

Mr. NORRELL. You think about 1 million acres now have the weed on it?

Mr. CLAWSON. We have some figures in here on that. We think that there is in total about 1.7 million.

Mr. NORRELL. About 1.7 million?

Mr. CLAWSON. Of which a little over 1 million is land under our jurisdiction.

Mr. NORRELL. Would it be possible, if you had the money, to go in there and do the job, let us say, in a year's time?

Mr. CLAWSON. I think, Congressman, once you get any poisonous or noxious weed firmly established in an area you never get completely rid of it. That is our feeling on this one. It will never vanish now from the western scene.

But if it can be kept within some bounds it will not be too dangerous. For instance, in the areas where there is reseeding and where reseeding

is possible and where we get good grass stands it will be very limited in its occurrence, and its poisonous effects may be not too serious. In other words, either livestock will not eat it, if there is other good forage available, or, if they do eat it, it will not be in a fatal amount. It is not an accumulative poison. If there is good forage available they can consume limited amounts of it without it being fatal.

It is more a matter of management of the land and forage than it is of eradication.

Mr. NORRELL. In other words, when you get it cleared off you think you will have to supervise it in years to come?

Mr. CLAWSON. That is right. That is part of your normal grazing administration in any event.

Mr. NORRELL. Do you have any idea what that would cost?

Mr. CLAWSON. No. As you may recall, when we first came up asking for this item some questions were asked—I do not know whether you or someone else asked them—as to the ultimate cost of this. We did not know then and we do not know now the rate at which this will spread, the extent to which it will invade certain types of soil and certain climatic zones. They are just things we do not know.

I will say that all the experiences so far have indicated to us it is a more serious threat than we originally thought.

Mr. NORRELL. You could not venture even a guess as to the ultimate cost?

Mr. CLAWSON. If I remember correctly—and I am speaking now entirely from memory—our original guess was $35 million plus or minus 50 percent. Of course, I also want to say that in this sort of a control program we feel you are getting value received in terms of added forage you are getting out of it. In other words, we are getting substantial additional quantities of forage from this control program.

Mr. NORRELL. All right. We will insert in the record at this point page 43, and please add to that the same information regarding appropriations that you did for the other items.

Mr. CLAWSON. Yes.

(The matter referred to follows:)

Halogeton infestation, August 1952

[In acres]

State	Bureau of Land Management lands	Other lands	Total	Rights-of-way
				Miles
Nevada	490,100	232,500	722,600	6,250
Utah	314,530	292,930	607,460	3,042
Idaho	190,000	105,000	295,000	250
Wyoming	85,000		85,000	
California	1,000	22,600	23,600	225
Montana	5,000		5,000	
Colorado	45	10	55	
Total	1,085,675	653,040	1,738,715	9,767

Weed control

Appropriated 1952	$1,810,605
Appropriated 1953	1,345,000
Budget estimates	1,344,000

GENERAL ADMINISTRATION

Mr. NORRELL. Next is the appropriation for "General administration," as shown on page 45. I see some increases there. Would you please explain them?

Mr. CLAWSON. Well, as a matter of fact, the increase requested there is a result of the increases requested in the other items, and is less than proportionate thereto.

This covers the usual administrative items in an agency's budget; that is, your so-called housekeeping activities and the like.

I should like to point out, in the case of the Bureau of Land Management, that sort of work is very much larger than you might ordinarily think. I mean, in recent years our budget has been $11 million to $13 million. Now, if you would say:

Well, an agency with $11 million to $13 million of expenditure ought to spend about so much for general administration—

That overlooks the fact that we have the responsibility and the work of collecting all this money we are talking about. Now, it does not cost as much, perhaps, to collect $64 million as it costs to spend it in terms of hiring people and the like, but we have to have and do have a very substantial accounting force to handle the 100,000 or more accounts, and all sorts of additional problems, including legal problems, and other matters which arise in connection with the collection of money; so that it is my feeling that our item for general administration is really very modest considering the total program of the Bureau, much more so than if you only look at the expenditure side of the Bureau's operations.

RANGE IMPROVEMENTS

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$356,086	$360,292	$380,000
Prior year balance available	526,497	313,948	100,000
Reimbursements from non-Federal sources	4,288	1,000	1,000
Reimbursements from other accounts	626		
Total available for obligation	887,497	675,240	481,000
Balance available in subsequent year	−313,948	−100,000	
Obligations incurred	573,549	575,240	481,000

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Range improvements:	
1952	$573,549
1953	575,240
1954	481,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	18	19	19
Full-time equivalent of all other positions	26	29	19
Average number of all employees	44	48	38
Average salaries and grades:			
General schedule grades:			
Average salary	$4,028	$4,181	$4,188
Average grade	GS–5.8	GS–6.1	GS–6.1
Crafts, protective, and custodial grades:			
Average salary	$5,315	$5,315	$5,315
Average grade	CPC–10.0	CPC–10.0	CPC–10.0
01 Personal services:			
Permanent positions	$72,069	$79,888	$79,888
Part-time and temporary positions	105,485	116,250	76,282
Regular pay in excess of 52-week base	296	337	330
Total personal services	177,850	196,475	156,500
02 Travel	11,661	13,100	12,500
03 Transportation of things	11,213	12,500	12,500
04 Communication services	479	600	500
05 Rents and utility services	2,059	2,400	2,500
06 Printing and reproduction	46	100	
07 Other contractual services	49,894	67,882	65,000
Services performed by other agencies	36,136	20,950	
08 Supplies and materials	156,821	132,458	125,000
09 Equipment	53,917	30,225	30,000
10 Lands and structures	72,228	97,000	75,000
15 Taxes and assessments	1,245	1,550	1,500
Obligations incurred	573,549	575,240	481,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$209,589	$134,309	$128,549
Obligations incurred during the year	573,549	575,240	481,000
	783,138	709,549	609,549
Deduct:			
Reimbursable obligations	4,914	1,000	1,000
Unliquidated obligations, end of year	134,309	128,549	98,549
Total expenditures	643,915	580,000	510,000
Expenditures are distributed as follows:			
Out of current authorizations	643,915	140,000	285,000
Out of prior authorizations		440,000	225,000

TAYLOR GRAZING ACT—REVENUES AND DISBURSEMENTS

Mr. NORRELL. Now I would like to talk a little bit about the Taylor Grazing Act.

Mr. CLAWSON. Yes.

Mr. NORRELL. You do not use that name "Taylor" much now. Why have you dropped the name?

Mr. CLAWSON. I do not think we have done it deliberately.

Mr. NORRELL. You had not discovered it?

Mr. CLAWSON. This is the same form of presentation that we have used now for 2 or 3 years, at least.

Mr. NORRELL. While we are on it, is the Taylor Grazing Act now self-sustaining all the way around?

Mr. CLAWSON. Well, you are talking now about the grazing administration part of the act?

Mr. NORRELL. Is it self-sustaining? How much do we go into debt on it every year over and above the income?

Mr. CLAWSON. Let us submit the same statement on income and expenditures that we have submitted in previous years. The costs of the Grazing Administration are covered by the receipts in the same way that they have been in previous years.

(The matter referred to follows:)

Comparison between estimated income from grazing and appropriation estimate, fiscal year 1954

Gross income:		
Sec. 3 (inside grazing districts)		$1,750,000
Sec. 15 (outside grazing districts)		400,000
		2,150,000
Apportionment of income:		
Range improvements	$391,600	
Payments to States	382,300	
		773,900
Net to United States Treasury		1,376,100
Appropriation warranted on the basis of the BAE formula (70 percent chargeable to livestock industry; 30 percent chargeable to public benefits)		1,965,850
Appropriation estimate:		
Grazing Administration	$1,478,000	
Fire suppression	132,000	
		1,610,000
Excess over appropriation estimate		355,850

Mr. NORRELL. I am trying to determine whether or not the collections under the Taylor Grazing Act equaled the total amount of the appropriations that we make each year plus the funds that are paid over or disbursed to the area in which you are operating.

Mr. CLAWSON. Well, here is the data, Mr. Congressman, which I will show you.

Mr. NORRELL. That includes the total receipts and disbursements regardless of where the money goes; does it not?

Mr. CLAWSON. Well, let me go through it step by step.

Mr. NORRELL. Make it as short as you can.

Mr. CLAWSON. The gross income is actual money paid into the Treasury from within grazing districts and from outside grazing districts, and we estimate that as $2,150,000. These are estimates for 1954. On that basis, the amount that would go into the range improvement fund would be $391,600. The payment to the States would be $382,300 or a total of $773,900, leaving a net total to the Treasury of $1,376,100. Now, the basis on which the fees were established some 6 or 7 years ago was that 70 percent of the cost of the administration of the grazing districts, and claims in those districts, was chargeable to livestock leases and 30 percent to special benefits. If you take that assumption, then that would require an appropriation of $1,965,800, the actual amount requested, or $1,610,000, leaving an expenditure in excess of appropriation estimate estimated at $355,850.

Well, I think I have traced it through each of the steps.

Mr. NORRELL. Summing it up, there is no money that is paid out to any of the areas out there other than what you show here?

Mr. CLAWSON. That is correct.

Mr. NORRELL. That is, either by you or by the Treasury Department?

Mr. CLAWSON. That is correct.

Mr. NORRELL. In other words, no part of the money you have collected is disbursed by either you or the Treasury Department except what you have shown here?

Mr. CLAWSON. That is correct.

CONSTRUCTION

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$700,000	$2,750,000	$2,100,000
Prior year balance available	492,787	266,305	
Reimbursements from other accounts	602		
Total available for obligation	1,193,389	3,016,305	2,100,000
Balance available in subsequent year	−266,305		
Obligations incurred	927,084	3,016,305	2,100,000

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
1. Access roads	$925,315	$3,016,305	$2,000,000
2. Buildings in Alaska	1,769		100,000
Obligations incurred	927,084	3,016,305	2,100,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
BUREAU OF LAND MANAGEMENT			
Total number of permanent positions	8	12	12
Full-time equivalent of all other positions			2
Average number of all employees	5	12	13
Average salaries and grades:			
General service grades:			
Average salary	$4,202	$4,524	$4,600
Average grade	GS–6.4	GS–7.1	GS–7.1
01 Personal services:			
Permanent positions	$41,240	$50,585	$51,910
Part-time and temporary positions	1,750		6,000
Regular pay in excess of 52-week base	160	240	200
Payment above basic rates	340		1,500
Total personal services	43,490	50,825	59,610
02 Travel	3,562	6,000	8,000
03 Transportation of things	326	275	750
04 Communication services	461	500	550
05 Rents and utility services			500
06 Printing and reproduction			800
07 Other contractual services	2,127	13,900	7,100
08 Supplies and materials	541	2,000	3,490
09 Equipment	11,294	1,000	2,000
10 Lands and structures		220,314	212,200
15 Taxes and assessments	154		
Obligations incurred	61,955	294,814	295,000

Obligations by objects—Continued

Object classification	1952 actual	1953 estimate	1954 estimate
ALLOCATION TO BUREAU OF PUBLIC ROADS			
Total number of permanent positions	12	12	12
Full-time equivalent of all other positions	7	50	22
Average number of all employees	16	60	32
Average salaries and grades:			
General schedule grades:			
Average salary	$3,811	$3,862	$3,885
Average grade	GS-5.4	GS-5.4	GS-5.4
01 Personal services:			
Permanent positions	$33,482	$37,000	$37,000
Part-time and temporary positions	19,258	150,500	66,200
Regular pay in excess of 52-week base	225	500	500
Payment above basic rates	5,747	10,000	10,000
Total personal services	58,712	198,000	113,700
02 Travel	2,895	9,000	5,000
03 Transportation of things	47	11,000	6,000
04 Communication services	31	2,000	1,200
05 Rents and utility services	282	10,000	6,000
06 Printing and reproduction	265	4,000	2,000
07 Other contractual services	15,579	89,000	43,300
08 Supplies and materials	3,210	118,000	57,000
10 Lands and structures	783,550	2,279,491	1,570,000
15 Taxes and assessments	558	1,000	800
Obligations incurred	865,129	2,721,491	1,805,000
SUMMARY			
Total number of permanent positions	20	24	24
Full-time equivalent of all other positions	7	50	24
Average number of all employees	21	72	45
Average salaries and grades:			
General schedule grades:			
Average salary	$3,968	$4,193	$4,243
Average grade	GS-5.8	GS-6.3	GS-6.3
01 Personal services:			
Permanent positions	$74,722	$87,585	$88,910
Part-time and temporary positions	21,008	150,500	72,200
Pay in excess of 52-week base	385	740	700
Payment above basic rates	6,087	10,000	11,500
Total personal services	102,202	248,825	173,310
02 Travel	6,457	15,000	13,000
03 Transportation of things	373	11,275	6,750
04 Communication services	492	2,500	1,750
05 Rents and utility services	282	10,000	6,500
06 Printing and reproduction	265	4,000	2,800
07 Other contractual services	17,706	102,900	50,400
08 Supplies and materials	3,751	120,000	60,490
09 Equipment	11,294	1,000	2,000
10 Lands and structures	783,550	2,499,805	1,782,200
15 Taxes and assessments	712	1,000	800
Obligations incurred	927,084	3,016,305	2,100,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$60,062	$772,128	$1,488,433
Obligations incurred during the year	927,084	3,016,305	2,100,000
	987,146	3,788,433	3,588,433
Deduct:			
Reimbursable obligations	602		
Unliquidated obligations, end of year	772,128	1,488,433	1,188,433
Total expenditures	214,416	2,300,000	2,400,000
Expenditures are distributed as follows:			
Out of current authorizations	214,416	1,300,000	1,000,000
Out of prior authorizations		1,000,000	1,400,000

ACCESS ROADS PROGRAM

Mr. NORRELL. I notice you have some construction items in here. How much do you have in 1953?

Mr. CLAWSON. This is one item where we are asking for less money than we received in 1953. In the present fiscal year, we have $2,750,000 for access roads in the O. and C. area of Oregon. I want to especially stress the fact that under the terms of the 1953 appropriation that money is coming out of what the counties would otherwise get under the law. In other words, if we had not appropriated that money for roads, the Federal Treasury would not have gotten it either. I do not know whether I make myself clear or not, but the terms of the current appropriation act provide that the counties will get 50 percent of the O. and C. receipts, and out of the rest—from the first 25 percent of the receipts—they will get anything that is left over after this $2,750,000 for road money has been paid back. The remaining 25 percent is paid to the Treasury. And from the way our sales have been going up to the present time so far, it looks like they will be large enough so that the 25 percent will just about cover this $2,750,000. Under the terms of the current appropriation, that amount would not remain in the Treasury, anyway. It would either go to the counties in terms of payments, or we would spend if for roads.

Mr. NORRELL. You have this year a decrease of $650,000 under the current year's funds?

Mr. CLAWSON. Well, yes. That is correct. The decrease is for access roads for $750,000, but partly offsetting that is $100,000 to construct some buildings in Alaska, so that the net decrease is $650,000.

Mr. NORRELL. How do your current estimates compare on the same items with your previous estimates?

Mr. CLAWSON. Well, I am not sure I get the full import of your question. In submitting these budget estimates, we had to put in necessarily estimated costs of building certain roads which were in advance of detailed surveys, and they were necessarily rather crude estimates. Now we have the Bureau of Public Roads making detailed engineering surveys on which you can let contracts for road construction. In general, road costs, like everything else, have been rising, and I am not at all sure but what the costs will actually turn out to be somewhat higher than the original estimate. But the discrepancies are not serious, in view of this general rise in costs in which we find ourselves. The same thing is true of the timber sales and the price of timber. They are rising also.

Mr. NORRELL. Are these access roads entirely on the public domain, owned by the Federal Government?

Mr. CLAWSON. Well, the way the O. and C. land lies in its checkerboard fashion, it has to cross some private land. We acquire rights-of-way across that either by condemnation or by sale or by donation, so that the road is entirely public road. I might say that these roads are necessarily servicing some privately owned timber.

CONTRIBUTION OF PRIVATE-LAND OWNERS TO ROAD PROGRAM

Mr. NORRELL. Do they make any contribution at all toward the maintenance and upkeep of those roads?

Mr. CLAWSON. What we propose to do in the nature of getting them to make a contribution is to charge them a toll for the use of that road, so they will bear their proportionate share.

BUILDINGS IN ALASKA

Mr. NORRELL. There is one other thing I want to mention here, and that is the Alaskan construction. Just touch on that as briefly as you can.

Mr. CLAWSON. Well, outside of the national-forest areas in Alaska, 98 percent of Alaska is public domain under the jurisdiction of the Bureau of Land Management. A large percentage of that land was originally forest land, and a large percentage of it is still forest land. There are local sawmills, and in addition to the sawing of rough boards, other uses are made of that.

There is a very serious fire problem in a lot of that area. Some of it is in quite remote areas, and if we are going to give it any measure of protection and any measure of management, it is necessary to have personnel within reasonable distances of those areas. It is just almost impossible in many areas of Alaska to maintain personnel unless you have buildings in which to house them, both for personal housing and office buildings and the like. They cannot be temporary buildings, either. We have had personnel living up there and offices carrying on in old CCC buildings, and that is pretty rugged stuff, no matter what you do to fix them up. This is to complete certain buildings in Fairbanks—well, it is actually outside Fairbanks at a ranger station—which we have there, and it also provides for the beginning of some construction at a little settlement of McGrath where we try to maintain fireguards and a station in the summertime and make it on a year-around basis. In Alaska we are trying now to protect against destruction a lot of the resources that we have seen destroyed in the States. It is a matter of trying to protect timber and other resources before they are completely destroyed.

Mr. NORRELL. Well, Mr. Clawson, if you have to have this now, how have you managed to get along all these years without it?

Mr. CLAWSON. Well, again, in Alaska until fairly recently no fire protection was extended at all to large areas. Up until comparatively recent times in large areas the fire hazard was not too serious, but as roads are being constructed and as the total population of the Territory is increased and as that population is extended out into the different areas, the fire hazard is increased very drastically. The fire problem in the settled areas in Alaska is very much like it is in the settled areas of the West. It is a problem of early detection of your fires and getting out to them. We are gradually extending that sort of protection in Alaska as the increased population and the opening up of the Territory has increased the fire hazard. Of course, this is a part of the general settling of the Territory that is going on.

EMPLOYEE HOUSING

Mr. NORRELL. When you spend this $100,000, you would have 1 residence containing 4 rooms at Fairbanks at $17,000 as a part of that; is that right?

Mr. CLAWSON. Yes.

Mr. NORRELL. And you would have an office building for your manager. In other words, that $100,000 is just to give him a house and an office setup to live in and to work in?

Mr. CLAWSON. Well, you will notice that one of the largest items is the completion of the garage at Fairbanks. That is a heated garage in which you can work in the most severe weather.

Mr. NORRELL. That would be for his use; would it not?

Mr. CLAWSON. No, sir. That is for the use of your whole fire equipment—trucks and other equipment.

Mr. NORRELL. Where would the others live?

Mr. CLAWSON. In the summertime we have a considerable staff of temporary fire help who would not be housed in Government quarters. As a matter of fact, this residence is very largely a bunkhouse arrangement.

Mr. NORRELL. How many of your employees at Fairbanks would be taken care of under this $100,000 request here?

Mr. CLAWSON. Well, most of our staff at Fairbanks is not going to be housed in Government quarters. At the most, one man on a year around basis will be in Government quarters.

Mr. NORRELL. If you take care of this man would not the next step have to be to take care of your other employees in Alaska?

Mr. CLAWSON. No. These amounts that are requested here cover our installation at Fairbanks. This begins the installation at McGrath. I will be quite honest with you. We intend to ask for funds for 1 or 2 other district ranger stations at relatively isolated areas. But this completes the business at Fairbanks, and there is no thought in our mind of housing all of our employees, but when you get into the isolated areas, you have got to house them. Our setup at Fairbanks is some little distance away from the town of Fairbanks, and it is necessary to maintain someone there on a year-round basis. In the summertime you have bunks in there where you can have foresters or temporary fire fighters. This cold storage item is a misleading title. That is a garage and machine shed which is not heated. It is not cold storage of food or anything like that.

Mr. NORRELL. Where is your man living now who would occupy these facilities?

Mr. CLAWSON. For the most part, we have found it impossible to maintain men in these localities, and we have had a terrific turnover of personnel.

Mr. NORRELL. Who would you put in the four-room house if you had it tomorrow?

Mr. CLAWSON. Well, one of our employees who is now in Fairbanks or else a new employee we would get.

Mr. NORRELL. Where is he living now, or do you know?

Mr. FALCK. Let me answer the question, Congressman. What this amounts to is that here we have all the equipment that is used during the summer on this fire-protection program stored in there in the wintertime, and what we try to do is go over and repair it during the winter. All we will have in there during the winter will be a mechanic and helpers. Up to this time, a lot of that equipment has been sitting in the open in the snow, and subject to the weather. This is not a house for the manager. This is nothing but a bunkhouse in which these mechanics and other helpers will live.

Mr. NORRELL. I see in item 3 you call it a residence.

Mr. FALCK. It may be an unfortunate statement to call it a residence.

Mr. NORRELL. You have it listed as a residence of four rooms at Fairbanks, $17,000. Is that what this item is?

Mr. FALCK. As I understand it, it will be a simple four-room bunkhouse, probably with a kitchen and a stove.

Mr. NORRELL. But there is a dwelling house; is there not?

Mr. FALCK. Well, for $17,000 up there, it is a very small thing.

Mr. NORRELL. But it is a dwelling; is it not?

Mr. FALCK. Yes, sir.

Mr. NORRELL. What do I understand to be the extension of steam lines from central heating plant to residence, $3,000? That is to heat the house; is it not?

Mr. FALCK. That is right.

Mr. NORRELL. The next item is water, $3,500.

Mr. FALCK. Yes, sir; we have to have water.

Mr. NORRELL. Gas and oil with underground tanks, $3,500.

Mr. FALCK. Yes, sir.

Mr. NORRELL. And then an office building, which I assume would be used by one or more up there.

Mr. FALCK. That is at another point, sir. That is all at McGrath. That is at a place other than Fairbanks.

Mr. NORRELL. That is at McGrath.

Mr. FALCK. Yes, sir. That is a little town where there are no other facilities.

Mr. NORRELL. How far is McGrath from Fairbanks?

Mr. FALCK. It must be 200 or 300 miles, anyway. McGrath, as I understand it, is away over on the west side there near the Yukon Valley.

Mr. JENSEN. It is on the highway, I think. Is it not?

Mr. FALCK. I do not believe there is a highway in there.

HOMESTEADING PROCEDURES IN ALASKA

Mr. JENSEN. Mr. Clawson, will you tell us what the conditions are now under which people can secure land in Alaska under your present method of approving applications for land or homesteads, especially in the Kenai Peninsula, where we now have a road completed down to Homer? The committee visited that area in 1945, and we all agreed that there was the greatest agricultural area in all of Alaska because of the fact that it is warmed by the Japanese Current and has a climate almost comparable to that of the northern part of Minnesota. Now we have the road completed and we have that great area which should be developed. Homesteads should spring up there, and it should be an area where we will finally have a good economy. But I understand it is still almost impossible for veterans, for instance, to secure a plot of ground in that area and in other places in Alaska. Tell us what the story is right now. Will you, please, sir?

Mr. CLAWSON. A lot of the Kenai Peninsula was included in some withdrawals some 4 or 5 years ago—I have forgotten the exact date—with the thought that arrangements might be made for some sort of sustained settlement in which you would try to help homesteaders actually develop their lands into farming and the like. Those withdrawals have mostly been lifted in the last year or so, and all of the

land close to the highway was opened up for entry. I do not know, but I would hazard the judgment that practically all that has already been entered upon.

Mr. JENSEN. You feel most of that has already been entered?

Mr. CLAWSON. I feel it has been entered upon by homesteaders and that entries have been filed upon it. In Alaska, if anyone files a homestead entry on any land that is not withdrawn, he is allowed to go further with his homestead. In other words, we do not have the same discretionary authority in Alaska to reject a homestead application that we have here in the States. So, if any veteran or anyone else comes in and files an application for a homestead in Alaska and the area is not withdrawn, the homestead entry is allowed and he is allowed to go further on it. A veteran with 2 years of service can acquire that land by 7 months' residence on it and by building a house. He does not have to cultivate any of the acreage. A nonveteran would have to live on it for 3 years and would have to comply with the cultivation requirement.

Mr. JENSEN. That is commensurate with the homesteading laws on the mainland?

Mr. CLAWSON. That is right. There has been a great deal of homesteading in Alaska since the war. I have asked our people, and we plan this spring to make some survey of what has happened in the areas that have been homesteaded. As near as we can find out, very little of the land is actually going into agricultural production. Most of them find the costs are greater than they can swing. They are simply not going into farming. There are exceptions to that, of course; but the amount of agricultural development is relatively limited. In part, of course, it has been because the settler does not have the capital and in part because there are relatively good paying jobs in Alaska. So, in many instances a man is interested in a place to live and work rather than to spend his time in clearing his own land.

In addition to the homestead law and its operation in Alaska, I would say far more important has been the Small Tract Act.

SMALL TRACT ACT

Mr. JENSEN. You say that is the Small Tract Act?

Mr. CLAWSON. Yes, sir; the Small Tract Act of 1938, under which up to 5 acres of land can be available to someone for residential purposes only, and there is no cultivation requirement.

Mr. JENSEN. But they can cultivate it?

Mr. CLAWSON. Yes, sir. If they want to grow a garden or anything like that on it, they are at liberty to do so. Under the act, the land is made available only as it is opened for entry, and in many areas we have tried to subdivide it and make available small tracts of land wherever there was public land around any growing community. For instance, down in the town of Kenai, an Air Force installation has gone in there within the last year, and we have opened it up. There are several hundred small tracts around that area. So, if someone wants a tract of land on which to build and live and does not want to farm, he can take 160 or any other acreage—he can get that much under the act—and, instead of that, you divide it into

much smaller acreage and allow that many more people in. I do not remember the latest figures, but I would guess perhaps 2,500 small tracts have been opened around the main towns in Alaska in the last 4 or 5 years. We have opened up areas wherever we possibly could and have tried to serve as many people as we possibly could in that way.

Mr. JENSEN. How much land can one person homestead in Alaska?

Mr. CLAWSON. One hundred and sixty acres.

Mr. JENSEN. That is the limit?

Mr. CLAWSON. Yes, sir.

Mr. JENSEN. The reason you hold this Small Tract Homesteading Act to 5 acres is because you felt that anyone who asked for only 5 acres was not interested in agriculture?

Mr. CLAWSON. Yes, sir.

Mr. JENSEN. So you did not want to give that kind of a person a lot of land which would simply lie idle; is that the purpose?

Mr. CLAWSON. That is essentially it.

DEVELOPMENT IN KENAI PENINSULA

Mr. JENSEN. You say in the southern Kenai Peninsula you have a lot of homesteaders there but very few of them are clearing their land and going into farming?

Mr. CLAWSON. That is right.

Mr. JENSEN. Is that because it is too expensive to clear the land and get it in shape for farming?

Mr. CLAWSON. Yes, sir.

HOMESTEADING ASSISTANCE

Mr. JENSEN. Is the Legislature of Alaska taking any interest in bringing more people to Alaska and assisting them in getting into agriculture?

Mr. CLAWSON. Well, I would hesitate to answer that. I know of no program by any agency, territorial or Federal, which is giving any very large assistance to settlers in getting them into agriculture. There is some assistance, as I understand it, and under some circumstances they can qualify for some ACP payments—agricultural conservation payments—for land cleared, but the amount of money that is available and the share of the costs covered are so small that in practice it is not very effective.

The Farmers Home Administration makes loans up there, but again both the amount of money that is available and what they require in terms of equity or security for credit means that the average homesteader cannot get a loan from them. I think it is also fair to say that a great many people homesteaded land in Alaska without the intent, probably, of going into agricultural production. They want to acquire some land—and this desire to own land is a very deep-seated matter with us—and I think that since they could acquire 160 acres as easily as they could acquire 5 acres, they have done that. And under the Territorial law until very recently there have been no taxes on land. I think a veteran would have been a fool not to

have taken 160 acres, because he could get it just as cheaply as he could get 5 acres—in fact, cheaper. If we sell him a small tract of 5 acres or less, we make him pay something for it, and if he takes a homestead, he pays the filing fee only.

Around some of the towns in Alaska—Fairbanks is the best example—around that town the growth of the town has actually been very seriously retarded by the lack of any area to further expand. That may sound absurd, but you have several military places there on one side of the town and a lot of area that has been homesteaded and the people have hung onto the land and there was no incentive to subdivide it, and they have been able to hold it without any cost to them at all. The same thing is true around Anchorage and some of these other towns. I am sure that same speculative aspect has reached some of the people who have been homesteading. I do not mean to be critical, because I might very well have done the same thing if I had been a veteran.

Mr. JENSEN. Of course, the Congress has been quite hesitant in encouraging too many veterans and too many people to go to Alaska because of the fact that it is a great risk to take so far as the climate is concerned and because of the high cost of everything in Alaska. I certainly do not want to be a party to encouraging people to go up there and spending what little money they have, only to become a burden to the Territory of Alaska or anyone else. There have been a lot of people who have gone to Alaska who have worked in the fisheries and in other places and have learned all the hazards and have then started farming in Alaska. They are pretty well schooled in what the problems are. Many of those people, I have been told, are now anxious to get a plot of ground on which to build a home and get into the farming business. They say they have been hampered by laws which make it almost impossible for them to acquire a homestead. I understand some revisions or some interpretations have been made in the homestead laws which make it easier to acquire land there.

CHANGES IN HOMESTEADING REGULATIONS

Mr. CLAWSON. I do not think the law has been revised, but by interpretative action a lot of the land has been opened up for homesteading.

Mr. JENSEN. Yes. That is my understanding. I realize the law has not been changed, but it has been through interpretation of the law. The homestead laws were broad enough to permit some changes in the rules and regulations which govern homesteading in Alaska.

Mr. CLAWSON. In a great many instances in Alaska we have been helpful in the last 4 or 5 years in assisting people to get either title or control of land on which they had squatted or used for many years. In some cases, they had been there for decades. For instance, along the Kenai Peninsula there has been a great increase in the number of fishermen who operate nets along the shore, and we have opened those areas up.

Mr. JENSEN. We are glad to have Mr. Taber, the chairman of the full Appropriations Committee, with us.

NEED FOR ASSISTANCE IN AGRICULTURAL DEVELOPMENT

Mr. Clawson, a few years ago the Interior and Insular Affairs Legislative Committee of the House was busily engaged in trying to write some legislation which would expedite the development of more agriculture in Alaska, especially in the southern part in the Kenai Peninsula. Do you have in mind any legislation which at this time you feel is necessary in order to get this job done in which the people of Alaska are especially interested and in getting more people into the Territory of Alaska under conditions which will not be as hazardous to start farming up there as they have been in the past, or do you know about that?

Mr. Clawson. Well, my own personal feeling—incidentally, so far as I know, this business of settlement in Alaska has not had any consideration at all by the present Secretary and his staff. They have been swamped with other problems, and I don't know that they have given it any consideration at all. But my own personal feeling is that you are not going to get agricultural development in Alaska by homesteaders on their own unaided efforts, no matter how competent and how energetic and how able they are. I think they are going to have to have a measure of assistance in terms of finances and perhaps other assistance—maybe a form of subsidy. The Matanuska, which was established in Alaska, undoubtedly cost the Government a lot of money, but it did result in an area of cleared land and farm land that is being farmed today, and it is the only area in the Territory that has any substantial amount of farming going on.

The problem of trying to get into farming on the Kenai Peninsula by any one settler is very great. One of the things is that there is not any production and the marketing of his product is a very real problem. One of their most marketable operations has been the furnishing of whole milk for the city of Anchorage. You have a good size city at Anchorage, but one farmer down in the Kenai Peninsula cannot afford to transport his milk to Anchorage alone. But if you had a larger development and a larger volume of production, it might be successful.

The development of farming in Alaska, as you know, is a pretty difficult and hazardous business at best, and I personally think the chances of successful agricultural development by individual homesteaders working entirely alone and without more capital than most of them have is pretty problematical. I am not sure what ought to be done about it.

TRANSFER OF LAND TO TERRITORIAL CONTROL

Mr. Jensen. As you know, many of the people up there have suggested on several occasions that a certain portion of Alaska, of the public domain, should be transferred from the Federal Government to the Territory of Alaska and be placed under the jurisdiction of the Alaska Legislature, which, of course, would be under the people generally of Alaska. They feel they are so far removed from the mainland that the Congress of the United States and the people of the United States have not, up to this time at least, taken sufficient interest in the problem of the necessary development of Alaska, especially since it has become sort of an Achilles' heel of our defense

program because of its lying within close proximity to the country that seems not to agree with a lot of our ways of doing things.

Mr. CLAWSON. We know which one you mean.

Mr. JENSEN. Have you given any thought to the proposition of turning over to Alaska such land as might be administered and handled probably by the Alaska Legislature, who represent the people of Alaska? Do you care to make a statement on that?

Mr. CLAWSON. Yes. I am not averse to stating my own views. Again this, so far as I know, has had no attention at the secretarial level, and I am not in any way proposing to speak for Mr. McKay on it.

Mr. JENSEN. The reason I mention that is this: Alaska, of course, has been supported to a great degree by tax dollars from the United States. My interest is not only in trying to get away from the cost to the taxpayers of the mainland and their being required to continue to support so much of the cost that is necessary for Alaska. I hope that in time, if Alaska will take over the responsibility of some of their public domain, so that the taxpayers of America might be relieved to some degree, and take over the responsibility themselves of trying to run their own show. This must be done before the Territory of Alaska can expect to develop into a self-supporting area.

Mr. CLAWSON. Well, the University of Alaska was given a land grant of 100,000 acres to be selected anywhere it chose. I do not remember precisely when, but more than 20 years ago they received that grant. So far, the university has exercised its option on less than 10,000 acres of that 100,000 that it was entitled to. The fact which I am trying to get at is that it would cost the Territory of Alaska or any instrument of the Territory substantial money to take over the public land and dispose of it. The land in Alaska cannot be, in my judgment, with some limited exceptions around towns and elsewhere, disposed of without incurring some net loss. It would cost you more to do it than you would get out of it. These free homesteads which you were talking about—if they were to put them up and attempt to get a limited sum per acre out of them and also retain the other features of the program, there would not be anything in it for them.

The statehood bills that were offered in the last Congress contemplated giving the Territory about 10 million acres to be chosen wherever it desired. Those bills required that that acreage be taken in blocks. You could not take 10 acres here and 10 acres somewhere else. But my guess is that the Territory would be very slow to take over land under that kind of provision. In other words, land in Alaska is of very dubious value as an economic proposition and would be small in their return of marketable resources. However, you have a few areas where there is profitable mining and, of course, you have your fisheries along the coast and other things.

OIL DEVELOPMENT IN ALASKA

There are 2 or 3 things we are primarily interested in in the Bureau which have considerable possibilities for sustained production and permanent employment and the like in Alaska. One thing which was approved here roughly a month ago—shortly after the present Administration came into office—was a development contract for oil

development in an area of Alaska in which one of the major oil companies of the United States has agreed to spend $400,000 a year for drilling each year for 6 years. Actually, it is quite apparent that they are going to spend far more than that. That will be the first really serious testing on a large scale of a potential oil area in Alaska that has ever occurred, except, of course, that which the Navy has carried on up at Point Barrow. If they should be successful in getting a major field developed, you can see what a great impetus that would lend to the area for oil development. There, of course, would have to be a refinery established and other operations in connection with the oil exploration which offer employment in that place.

FOREST PRODUCTS DEVELOPMENT

Of course, they have the pulp mill at Ketchikan and other forest developments in southern Alaska that are mostly Forest Service and Department of Agriculture interests. But we have real forest potentialities in the area generally to the north of Anchorage. There are large birch stands in that area and, as you know, birch has become very scarce here in the continental United States. We have been trying, so far unsuccessfully, and we think there is a potentiality there of a permanent year-round industry. A few years ago, we had an outfit interested in it to come in there with a plant that would have employed 300 men on a year-round basis, but they do not want to own the land. They only wanted to buy the timber off the land.

Let me say this on the question of homestead and agricultural development. There has been more of the good land, by Alaskan standards, and farmland homesteaded, and if it were all cleared and put into agricultural production, it would far more than supply any potential market that Alaska now has.

Mr. JENSEN. You have not quite answered my question. I asked you if you had ever taken a position or if your Department had ever taken a position on turning over land, other than possibly on the bill which seeks to make Alaska a State and includes selection of 10 million acres. Has your Department taken any position on turning over to the Territory of Alaska any lands which would be under the control of the Territory of Alaska?

Mr. CLAWSON. I think not, except that one.

ALUMINUM PLANT

Mr. JENSEN. I had word not too long ago that one of the major and larger aluminum companies of America wanted to build an aluminum plant in Alaska, and for some reason or other the Territory of Alaska or the Department of the Interior discouraged the building of this aluminum plant. Do you have any knowledge of that?

Mr. CLAWSON. Well, I have some knowledge of the proposed construction. That is a matter of public record, which was put out generally. The aluminum company put out a brochure on it and put out press statements and so on. But I am unaware of any discouragement from the Department. If there has been any, I am not aware of it. If the aluminum company were to build according to its plans, it would have to purchase or acquire a substantial area

of land, and the only way that could be acquired would be by a special act of Congress. There is no existing authority that would enable them to purchase the several thousand acres of land which they wanted to purchase.

Mr. JENSEN. I might tell you that it was a high Territorial official who told me that the aluminum company was anxious to build an aluminum plant, quite a sizable one, in Alaska, and that the Interior Department threw cold water on the whole deal. He told me further that one of these economists that you spoke of today made the remark that they did not want any private monopoly starting up in Alaska.

Mr. CLAWSON. There is no question of the aluminum company wanting to build up there.

I might say that the water that they would use for waterpower would come from the Canadian side and would be carried back through a tunnel and dropped down to sea level on the Alaska side. They have not been able yet to make the necessary deal with the Canadian Government to acquire the water rights. I repeat what I said that I am not aware of cold water being thrown on it.

There was a press story, and I never verified it, that former Secretary Chapman was reported to have said that the question of monopoly in acquiring an area for a company town in which the entire thing would be property owned by the aluminum company was a matter which required careful consideration, or words to that effect.

Mr. JENSEN. The reason I bring it up here is because, as Commissioner of the Bureau of Land Management, you are responsible for the allocation of land in Alaska, and I wondered if, by any chance, anyone in your Department, or you yourself, had had any request for land acquisition from the aluminum people.

Mr. CLAWSON. Well, let me comment on that. Three years ago—I could ascertain the date, but it was at least 3 years ago—the area in which this plant might be built was withdrawn so that it might be homesteaded and the people get in there and acquire it.

Mr. JENSEN. I see.

Mr. CLAWSON. Now, last fall we withdrew a slight additional area which we thought might be suitable for building a town also, but in both instances that was in the expectation and for the purpose of facilitating the development when everything else was ready and prepared.

As I said a while ago, there is no existing legislation under which the aluminum company could acquire the area that it wanted, and their lawyers were in last fall sometime and talked to some of our lawyers about the form of legislation that they might get someone to sponsor to allow them to purchase the area they wanted. We never made any official comment on it at that time.

Frankly I raised some questions in my own mind as to whether you should allow one company to purchase all of the available land on which you might build a town.

This particular site lies in a valley with very steep mountains on either side. Although there are miles of public land there, there is only one very limited area that has remotely a possibility for building on it. I think that there would be some question about keeping open some area so that an individual can go in and acquire land to build on, but it has never come up to that point at all.

My understanding is that the aluminum company's plans at present are wholly suspended pending some negotiations with the Dominion of Canada about the use of this water. I do not hesitate to say personally that I would be delighted to see the aluminum company come in there. They were talking in terms of 4,000 year-round jobs, with a community of 20,000.

Mr. JENSEN. That is right.

Mr. CLAWSON. To Alaska that is something. We should by all means facilitate it. To raise the question as to whether it should be exclusively a company town or whether there should be some area open for individuals to go in and build on, I do not think that is throwing cold water on the whole thing.

Mr. JENSEN. Have the negotiations ceased or are they still negotiating?

Mr. CLAWSON. I have not seen or heard anything of the aluminum company's representatives for several weeks, and I do not know what is going on with Canada.

ROADS STANDARDS IN ALASKA

Mr. JENSEN. Now, another thing, I was also informed that the Territorial Legislature of Alaska had recommended that any roads in Alaska be designated to be 100 feet wide, and they had a hearing going on that proposition when there were people there from the Interior Department. I do not know whether you had any people there or not.

Mr. CLAWSON. No.

Mr. JENSEN. Some of the officials from the Interior Department wanted the road width to be 200 feet. The people who were at this hearing maintained that the roads should not be over 100 feet wide, that is, any new roads that might be built except possibly the main traveled roads. They thought they had the situation pretty well settled until they got a letter from the Bureau of Roads here in the United States designating the width of the roads to be 300 feet. Do you know anything about that?

Mr. CLAWSON. I do not know anything about a Territorial legislative hearing on the matter. The question of the most desirable width of the rights-of-way and roads in Alaska has been discussed repeatedly. Within the Department there has been considerable difference of opinion on it.

I do know, if my memory serves me correctly, the right-of-way of the Alaska Highway, that part of it which lies in Alaska, and I am speaking of the highway from the beginning down in Dawson Creek in Canada, clear up to Fairbanks, and I have driven over that highway. It is about 1,500 miles long, and only about the last 300 miles are in Alaska. The other 1,200 miles are in Canada. On that highway the road or right-of-way is 600 feet wide.

On the other highways in Alaska the width depends upon the designation of the road, that is, the character of the road. There are certain relatively few main roads that have a 300-foot right-of-way, and certain other highly improved roads, but not quite such main roads that have a 200-foot right-of-way. Then all other roads which would include country roads, have a 100-foot right-of-way.

Now, those apply subject to any existing rights that any individuals have. In other words, if you had a tract of land which ran right down to the edge of the road, and there are such things in Alaska, literally, where I have seen buildings right down where they abutted right against the road, then, of course, that was not influenced or restricted by this establishment of a wider right-of-way.

Now, the purpose of these wider rights-of-way is to keep the buildings back a reasonable distance off the road itself.

The scenic qualities in Alaska, the scenery and the tourist trade, those are all things that I think all feel ought to be protected and encouraged in various areas.

One of the reasons I drove up to Alaska in 1949, and the only time I have been in Alaska was to see what had been done along the line of maintenance of our part of the road because I had heard all sorts of arguments about it, that you could not build back off any distance from the road, that the snow-removal problem was impossible, that if you got back off the road that tourists would not stop, and so forth. Canada, however, keeps a wide right-of-way. All the developments along the road are back. I could not say, nor could I find out from talking to people that it has hampered them. I found, moreover, that some of the more recent and better establishments in Alaska were back off the road a reasonable distance, but I never heard until you recalled it, of this business of a Territorial legislative hearing.

Mr. JENSEN. Off the record.

(Discussion off the record.)

ACQUISITION OF LAND

Mr. FENTON. I notice in looking through your justifications that you say that you have so many applications for the granting of land.

Mr. CLAWSON. Yes.

Mr. FENTON. Today there is more public domain than there was in 1930. How does that figure? Have you acquired more public lands or were lands turned back to the Government?

Mr. CLAWSON. No, we do not, Congressman, but the other agencies do. We have no authority to buy land. We can trade land with someone, and we might get more acreage in one case than we give, depending on the value of the land involved. We try to trade on equal value, but we dispose of land.

Other agencies, the military agencies, in particular, in the last 10 years, the Forest Service and other agencies have purchased land. The acreage of the original public domain has been dropping slowly but steadily. The acreage of land that has been purchased has been rising in the last 20 years. Those two things have, to some extent, offset one another. As I was trying to outline to the Congressman from Arkansas a little bit ago, as a matter of fact the statistics on all of this are so bad that nobody knows precisely what has happened, but the Bureau of Land Management has been acquiring no land. We have no authority to acquire land.

MANAGEMENT OF RANGELANDS—COSTS AND REVENUES

Mr. FENTON. I have just one more question, and that is regarding the Taylor Grazing Act.

Mr. CLAWSON. Yes, sir.

Mr. FENTON. I notice in your statements of distribution of receipts to States and counties for the fiscal year 1952, under the Taylor Grazing Act, that you distributed $159,598.60 and to the Taylor grazing districts $172,385.18.

Mr. CLAWSON. Yes.

Mr. FENTON. Then on page 18 in your request for management of grazing lands you are asking for $1,610,000.

Mr. CLAWSON. That is right.

Mr. FENTON. It is not a very good paying proposition.

Mr. CLAWSON. These amounts on page 5 are those which were paid to the States. On the preceding page, page 4, is the total amount of receipts collected, and they ran about $2 million in 1952. It is estimated that in 1954 they will amount to $2,150,000. That is grazing, sections 3 and 15.

Mr. FENTON. You just about break even, or you make a little money.

Mr. CLAWSON. Well, the fees were set to bring in the user's share of the cost of administration. They were set on a cost of administration theory a couple of years ago.

Mr. FENTON. What is the breakdown of those fees; I mean what do the States get and the counties, and the Federal Government?

Mr. CLAWSON. The fee is in two parts, Congressman. There is a range-improvement fee, which at the present time is 2 cents per head of cattle per month. That is only an indefinite appropriation and is fully appropriated back for construction, maintenance, and range improvements.

Then there is the grazing fee, so called, which is now 10 cents per head of cattle per month. There is a total fee of 12 cents a head, of which 10 cents is for grazing. Of that 10-cent fee 12½ percent is to go back to the State from which it originated and nothing to the counties. The other 87½ percent stays in the Treasury to offset appropriations which are made for grazing administration.

Mr. FENTON. What do the individual lessees of those grazing lands pay?

Mr. CLAWSON. They pay 12 cents per month for each head of cattle that they graze.

Mr. FENTON. How many acres of land do you have?

Mr. CLAWSON. Somewhere over 160 million acres to 170 million acres. While there are 185 million acres of land that we administer, some of that is too barren for any grazing. I can provide you with the exact figure. I do not have it readily in mind.

LEASE AND DISPOSAL OF MINERAL RESOURCES

COAL LEASES

Mr. FENTON. Referring to these leases on mineral lands and coal lands, do those fellows who get those leases keep them up as a rule?

Mr. CLAWSON. You are speaking primarily of the coal leases?

Mr. FENTON. Yes.

Mr. CLAWSON. Well, as a matter of fact, the western coal industry is in a rather depressed condition, as you undoubtedly know.

In the first place, the leases are sold competitively for coal, but they are not put up for sale unless the Geological Survey certifies to us that there is a market for coal that is not being now satisfied from any present production.

We try to limit the opening up of new mines to meet a recognized market so that you will not just squeeze out some other mining area and let some of the coal be unmined that might otherwise be mined and the like.

So, the coal leases are handled under pretty careful supervision of the Geological Survey to insure good mining methods, good recovery, and the like, so it is my feeling that they are pretty well taken care of.

COAL MINE FIRES

As you know, there have been fires break out on public domain at coal deposits from mines that were abandoned or in existence where, apparently, there was no mining operation and there have been some fires on public-domain areas not under lease.

Mr. FENTON. Has the Bureau of Mines taken care of any of those fires?

Mr. CLAWSON. Yes, in that item they have for fighting fires, that is one of the things that they use it for, for the fighting of fires on public-domain coal deposits that are not under lease. If they are under lease it is the lessee's job to fight it, and they have to put them out.

Mr. FENTON. They have done a pretty good job on that, have they not?

Mr. CLAWSON. So far as I know they have done an excellent job.

Mr. FENTON. Is the Geological Survey pretty well up to date on its mapping of these coal areas?

Mr. CLAWSON. I would prefer that you ask them about that. I do not know. In the ones that we have requested them on they are reasonably up to date. What they have done on other than those I do not know.

REVENUE FROM COAL LEASES

Mr. FENTON. What was your revenue from coal leases?

Mr. CLAWSON. It is not shown separately here. The total Mineral Leasing Act is shown here all together, and that is primarily oil and gas. The revenues from coal have not been large. We have very large deposits of coal in the public lands.

Mr. FENTON. Lignite?

Mr. CLAWSON. Well, relatively low-grade coal. The revenue for the fiscal year 1952 was just a shade over $1 million, $1,000,250.

Mr. FENTON. What about oil?

Mr. CLAWSON. On oil and gas it was $48,097,000. In other words, $1 million as contrasted to $48 million.

Mr. FENTON. Do you have many applications for coal leases?

Mr. CLAWSON. Well, a few now and then, but they are not very large. There are some exceptions to that, but in general there are not many, and they are not large.

Mr. FENTON. Do you have the total amount of coal, particularly lignite, sold from the public domain?

Mr. CLAWSON. I can look it up for you. We have the figure, but I do not have it in mind at the present time.

Mr. FENTON. Furnish it for the record.

Mr. CLAWSON. Yes, sir.

(The matter referred to follows:)

COAL PRODUCTION

The production of coal during fiscal year 1952 on lands administered by this Bureau amounted to 8,167,642 short tons. Of this amount, lignite-coal production on public lands amounted to 638,537 tons.

COMPUTATION OF BENEFITS AND COSTS UNDER TAYLOR GRAZING ACT

Mr. JENSEN. Since Dr. Fenton has brought up the Taylor Grazing matter again I would like to get back into that for just a minute. You estimate that during the fiscal year 1953 you will collect grazing fees to the extent of $355,850 more than you will expend for grazing service, that is, more than you will expend for personnel and other items included in expenditures. Is that right?

Mr. CLAWSON. I am afraid that it is not strictly correct. It is a little more complicated than that, Congressman. I do not want to mislead you. I am perfectly honest about it. It would be easy to say, "Yes" to your question, but I might have misled you by so doing. You will notice there that you have the item, "Net to United States Treasury, $1,376,100."

Mr. JENSEN. Yes.

Mr. CLAWSON. On the basis on which fees are now established it relates to a study that was made 6 or 7 years ago. In that study it was the conclusion of those who made it that 30 percent of the benefits from the administration of the grazing in the grazing districts was chargeable to the general public benefit.

Mr. JENSEN. Yes.

Mr. CLAWSON. Such as might be extended to any type of land, whether it is private land or otherwise, and that only 70 percent of the benefit was properly chargeable to the livestock users.

That conclusion might be argued with, but that was the conclusion of that study and that was the basis on which the present fees were established.

If you accept that conclusion that only 70 percent should be chargeable to the users, then this $1,376,100 would justify or support or warrant, as the word is used here, an appropriation of $1,965,850, and that is, indeed, $355,850 more than the requested appropriation. Do you see what I am getting at?

Mr. JENSEN. I understand.

Mr. CLAWSON. I was not sure whether you recognized that 30-percent item in your early question.

Mr. JENSEN. I am glad you explained that because the provisions in the Taylor Grazing Act provided that the people who have these grazing contracts with the Bureau of Land Management should pay an amount that would balance the expenditures which are made for the grazing districts.

Is not that the fact?

Mr. CLAWSON. The act itself simply says that the fees established shall be fair and reasonable. It says fair and reasonable, and it does not set any other standards. The hearings and other things of that sort went along the line you are suggesting.

Mr. JENSEN. Yes.

Mr. CLAWSON. Different interpretations have been put on different parts of the hearings.

Mr. JENSEN. Yes, I understand that, but Mr. Taylor himself intended that the grazing districts should be self-supporting, that they would pay an amount commensurate with the cost of administering the grazing districts set up. That is what I think every Member of Congress expected at that time, and that is what the people that use the public domain for grazing expected, and agreed to live up to.

Now, we are finding that they are falling short a considerable amount.

I had hoped that it was more than self-supporting to the extent of $355,850 because I would then have asked the committee to apporpriate $355,850 more for soil and moisture conservation than the $2 million which the budget requests. I had that fully in mind today, but now since you explain this I hesitate to do so.

Mr. CLAWSON. Well, I would like to have the money, do not misunderstand me, but I do not want to mislead you. In the first place I suspect you would have caught up with me sooner or later, but I have tried to be perfectly fair and honest with you and I do not want you to misunderstand any of these figures.

DESIRABILITY OF INCREASING GRAZING FEES

Mr. JENSEN. I wanted to show my good faith in what I said to the national advisory committee of the cattle and sheep raisers of the West who were here the other day. They had appearing with them a number of Members of Congress and Secretary McKay and his staff at that time. As you will remember, I suggested that they take under consideration the proposition of raising cattle fees up to 25 cents a head and their sheep fees up to 5 cents a head, and then, in return for that I felt that we could properly use most of that money, or the additional money at least, to carry on soil and moisture conservation on the grazing lands.

Now, I wanted to show my good faith here today in that statement, because if this $355,850 would be available over and above the income of the Taylor Grazing Act, then I am ready and willing to appropriate this additional amount of $355,850 for soil and moisture conservation on the grazing lands.

Even though I understand that the advisory committee felt that this was not a proper time to raise grazing fees because of the prices that now exist on cattle, I still feel that now is as good a time as any to raise their grazing fees and, by the same token, do what I had hoped Congress would do, take most of that additional money which we would collect in fees and spend it on soil and moisture conservation on the lands which they lease from the Government for grazing purposes.

I wanted to get that in the record because I hope that that advisory committee will still take my proposition under advisement, and I hope that you will also give that proposition which I expressed there the other day the consideration that it should have. Will you do that?

DESIRABILITY OF INCREASING MINERAL LEASE FEES

Mr. CLAWSON. Yes. We even think of that same principle beyond grazing.

Mr. JENSEN. We were talking about the oil and mineral leases.

Mr. CLAWSON. That is correct, and on all of it. If we could get the revenues up to a reasonable maximum and then deliberately

plow back into our resources some of the money we collect from them. I think that is a philosophy that is good from every point of view. That is a sound policy, and more particularly from the point of view of the future of our country to the welfare of our land.

NEED FOR CONSERVATION OF THE LAND

Mr. JENSEN. Absolutely. Even though we need money now in the Treasury of the United States to offset this terrific deficit we have and to try to balance the budget, when we spend money to conserve the soil and conserve the forests and to conserve all of our natural resources, we are doing something not only for today, but for posterity.

If we do not do it what is going to become of our children and their children? They simply are not going to have the necessary land on which to expand. Here we have our population increasing over 2 million a year, and we absolutely must see to it that this land in the Great Plains States is conserved for future posterity. The fact that we may not need it ourselves should not be the basis on which we spend this money for this purpose. We owe it to posterity to stop this terrific waste that is going on. If we do not we are not doing a thing that we should do as guardian of this Nation today, and of our great way of life.

CONSOLIDATION AND ELIMINATION OF FIELD OFFICES

In conclusion, let me ask you, Mr. Clawson, to go through your budget requests again with your able assistants and attempt to ferret out every item where we might save some money which should be saved.

For instance, looking at that map, I see dots that represent offices in the Western States, and, without counting them I would say that there are possibly 55, just at a glance. Every kind of office that you could imagine is there in your organizational setup.

Now, there are some of those offices that have been in existence in some of those locations for many, many years. I am wondering if they have not about done the job that they were set up to do? It is possible that their present duties are not commensurate with the number of people you have, that you cannot justify the number of people now employed in these offices.

I know in an office like Billings, for instance, that because of this great oil strike in North Dakota you are rushed to death. I am hoping that instead of building up more personnel at Billings that you will take personnel from other places and move them to Billings, and that you will consolidate your offices wherever you can.

We have a staff of experts now looking into the whole organizational setup in every department of Government. It is one of these things that we must do and we are going to try, as best we can, to eliminate any people who are not necessary who are now on the Government payroll. We are going to make some recommendations. If you do not make them it is quite possible that the committee will see fit to eliminate some of your offices after we get a report from our investigative staff and have a basis on which we can properly and justly make such reductions.

So, I am most urgently asking you to take another look at your organizational setup. Then at a later date tell us where you think you can make some changes or consolidations that will save some money and still give you the efficient organization that we want you to be and that I know you want to be.

Now, will you do that?

Mr. CLAWSON. Yes, we will.

We have been, to a degree, doing just that.

In the past 5 years we have cut the number of land offices almost in half by consolidation. We have reduced a number of other offices materially.

As a matter of fact, that map was honest when it was made up, but there are two cases in which consolidations have been made since that map was made up. So, I would say that we have made a number of changes. We are continually looking at that situation.

I would also say that at the last look I took we had gone about as far as we can go.

If you get your offices too big that means that the area that they serve is a very large area and that means extra costs in travel and extra time in travel and inconvenience to the public and the like, and you have to balance those things up in the picture.

We have been, I would say, most diligent in looking at that very point that you make. We have made a lot of changes in the past 5 years.

CLOSING A LOCAL OFFICE

I might also say that closing a local office is about as difficult a job as any Federal administrator ever does.

A lot of people are all for economy as long as it does not involve the office in their hometown.

Just this morning 1 office out West opened that was 2 offices last week. A consolidation of two offices was made over the weekend.

Now, I know I had some letters about it, I know the Secretary had some letters about it, and the Members of Congress from that State had some letters about it.

We have carried on this program at your urging quite actively in the last 5 years, and in almost every instance against a measure of opposition.

I think in every case where we have made a consolidation as much as six more or a year ago that the results have proven the wisdom of it. As to the ones that we have made recently there has not been time enough to appraise them.

Coming back to what you said a minute ago, Mr. Chairman, I do not know how many more consolidations we can make. I think we have almost gone practically the limit on that sort of consolidation.

Mr. JENSEN. You take another good look at it.

Mr. CLAWSON. All right; we do hope to.

WEDNESDAY, MARCH 4, 1953.

SOUTHEASTERN POWER ADMINISTRATION

WITNESSES

CHARLES W. LEAVY, ADMINISTRATOR
ANDREW D. BURT, CHIEF OF ADMINISTRATION
THOMAS H. WIGGLESWORTH, CHIEF, DIVISION OF OPERATIONS

Mr. JENSEN. The committee will come to order.

Mr. Charles W. Leavy, Administrator, and his staff, are before the committee this morning.

Mr. Leavy, I presume you have a statement which you would like to make.

GENERAL STATEMENT

Mr. LEAVY. I have a prepared statement, Mr. Chairman, but I think I might be able to highlight it and save a little time.

Mr. JENSEN. We will include your prepared statement in the record at this point.

(The matter referred to follows:)

Mr. Chairman and gentlemen of the committee, we believe that you are familiar with the functions and marketing responsibilities of the Southeastern Power Administration, therefore with your permission I would like to give you briefly some of the detail used in determining our budget request. Up to now the positions filled in the organization have been mainly those of the division chiefs and some in the lower grades. Because of the increasing volume and complexity of the work, it is necessary that the staff be enlarged by filling the positions in the middle grades and adding more lower-grade employees.

We are also faced with the task of constructing the transmission facilities for interconnecting and integrating the Federal generating facilities now in operation or soon to be in operation, in order to insure the Government of realizing the maximum benefits at all times.

SOUTHEASTERN'S APPROPRIATION REQUEST FOR FISCAL YEAR 1954

Southeastern now requests an appropriation of $8,440,000 with which to carry this work forward during the coming fiscal year. The request is divided into two parts. The first part requests $6,700,000 for construction and the second part requests $1,740,000 for operation and maintenance, which includes $1,390,000 for the purchase of power and rental of facilities.

CONSTRUCTION

First, I would like to outline briefly the reasons which underlie our request for the $6,700,000 construction item.

THE CONSTRUCTION PROGRAM

The construction program of the Administration provides for the 230-kv. transmission lines to interconnect the Federal generating plants now either in operation, under construction, or in the planning stage. This will insure that the maximum benefits from the projects in the southeastern area will be available for preferred customers with full return of the Government's investment. In addition, the construction program provides direct service facilities into the service area of private companies, who have consistently refused to consider Southeastern's offers for wheeling and firming arrangements to reach preferred customers of the Government who have a direct entitlement to and desire to purchase the federally generated power. This program contemplates, often through the use of the same facility, the performance of the following functions:

(1) The integration of the operation of projects in the several river basins in the Southeast.

(2) Delivery of hydropower at principal load centers of the area's power companies for wheeling to preferred customers and sale to the companies.

(3) Greater utilization of existing publicly and privately owned fuel-generating facilities to provide more marketable power.

(4) Direct delivery to preferred customers where existing facilities are not adequate or wheeling arrangements cannot be made.

The construction program for fiscal year 1954 includes the initiation of construction of 375 miles of 230,000-volt transmission line as an initial stage of development in the construction of a backbone transmission line for integrating the Federal hydroelectric plants in the Southeast. Such a high-voltage system is needed in the Southeast and should be undertaken immediately.

Most of the initial projects from which we are to market power are of the high head, large storage capacity type. In direct contrast, many of the Federal projects in the Apalachicola and the Alabama-Coosa River Basins which will come next are low head, "run-of-the-river" projects. By integrating the operation of the plants, the high head storage plants could replace the low head, run-of-the-river plants in times of flooding out of the latter plants. Likewise, the low head, run-of-the-river plants could supplement the high-head storage when low-water conditions prevailed in these basins. Preliminary studies show that integration of the Federal projects included in the program by federally owned and operated high-voltage interconnecting transmission lines will serve to increase the firm capacity of plants existing, under construction or being planned by the Corps of Engineers from approximately 700,000 to 1,250,000 kilowatts, an increase of 550,000 kilowatts of firm capacity.

When Southeastern's high-voltage grid has been completed, it will primarily serve to provide benefits of integration to the Government, but, in addition, the program contemplates interconnection at large load centers of the private companies for the sale, purchase, and interchange of power as well as for the delivery by the Government to the companies of large blocks of power for distribution over company systems to preferred customers of the Government.

The direct-service facilities provided for in the fiscal year 1954 program are in two categories. First: Those necessary to provide direct service from interconnecting lines as a function incidental to project integration. Second: Those made necessary by refusal of privately owned companies to furnish wheeling over existing lines.

OPERATION AND MAINTENANCE

The amount of funds requested for operation and maintenance is $1,740,000. This appropriation covers the system operation and maintenance program, the marketing program and related activities, purchase power and rental of facilities, and general administration.

The system-operation and maintenance program includes the dispatching of power, scheduling of generation and purchase of energy to meet contract commitments, and continuing studies to determine the capabilities of projects and proper integrated operation.

Fiscal year 1952 was the last year in which the Administration had no major direct responsibilities in connection with the operation of hydro projects. The power from the four projects then operating was sold under contracts which required little supervision. Three additional projects will come into operation in 1953. From these a number of different customers will be served and direct supervision by the Administration will be necessary. These will bring about the necessity for having specialists in various lines of activity which have not heretofore been required. Some of the key personnel will be employed during fiscal 1953. Salaries for those people will be on a full-year basis for the first time in fiscal 1954 and also in that year additional personnel to round out the organization will be employed. The largest single group in the Operation's Division in 1954 will be the Hydrologic Study Unit. It will be this group's responsibility to make all of the reservoir operation studies required in advance planning, contract negotiations, and operations. As an indication of the magnitude of this task, about 1½ man-years of work were required in studies of operation of the Philpott and Kerr projects during and in connection with the negotiation of the contract with the Virginia Electric & Power Co. for two-thirds of the output of the Kerr project. Additional studies will be required in connection with the disposal of the remaining one-third of Kerr power and the output of the Philpott project. This gives some indication of the work required in connection with the negotiation for the sale of power from each project. After operations commence continuing studies will be necessary and in connection with the integration program, far more complex and extensive studies of the operation of groups of projects will be required. There are 12 projects, which have advanced as far as the planning stage, which will be involved in these studies at the present time.

POWER MARKETING

The power-marketing program involves not only the contract negotiations and market studies but also load studies and cost-allocation and repayment studies. The projects of immediate concern are the John H. Kerr project, where a 204,000-kilowatt installation will be completed in August 1953; the Philpott project,

where a 14,000-kilowatt installation will be completed in January 1953; Clark Hill, with 280,000 kilowatts installed by October 1954, and Jim Woodruff, with 30,000 kilowatts to be completed in November 1954.

Marketing of power involves two distinct types of contracts: (1) Wheeling and firming contracts with private utilities or public sources of generation and transmission, and (2) power sales contracts with cooperatives, public bodies, and Federal agencies.

One firming and wheeling contract with the Virginia Electric & Power Co. has been negotiated by Southeastern. Two-thirds of the Kerr project capacity was involved in this negotiation which occurred over a 1½-year period. Approximately 332 man-days of time were involved in this negotiation exclusive of the time of clerical and administrative and other personnel who prepared contract drafts and handled correspondence incidental to the negotiations.

Negotiations with 16 rural electric cooperatives in Virginia and North Carolina for the sale of Kerr project power under the Virginia Electric & Power Co. wheeling arrangement lasted over an 18-month period with intermittent joint meetings.

The remaining one-third of the Kerr project must be disposed of, as well as the power from the other projects itemized above. Using the time required to negotiate the Virginia Electric & Power Co. contract as a yardstick for other projects, the necessity for the additional funds being requested can readily be seen. The power-marketing staff must negotiate with 6 major power companies and 3 public agencies to secure wheeling and firming agreements for the disposal of power to be marketed in fiscal year 1954, or very soon thereafter. In addition the preference agencies—of which there are 183 REA-financed cooperatives—259 public bodies and 146 Federal agencies in Southeastern's marketing area must be given opportunities to avail themselves of the federally produced power. The task of contacting these agencies and maintaining effective relationships in addition to actual contract negotiation itself requires a considerable marketing staff. Some of the other duties that must be performed by the staff is the determination of the extent and location of future powerloads and requirements within Southeastern's area; development of basic wholesale power marketing, exchange and transfer contract provisions; the preparation of contracts; administration of provisions of executed contracts, including consultation and negotiation with customers concerning service under such contracts.

Studies related to marketing made in 1952 include the following: 3 preliminary repayment schedules requiring 120 man-days; 6 power-utilization studies, 3 power-company-area-load studies, and 25 small-area-load studies requiring about 120 man-days; and 4 cost-allocation studies requiring 19 man-days. Maintenance of power statistics including load and load growth required 125 man-days. Three series of contract analyses required 25 man-days. Rate formulation and analysis required 31 man-days.

It is anticipated that the following studies and reports will be prepared during the fiscal year 1954: 11 repayment schedules requiring 625 man-days. 25 power-utilization studies, 13 power-company-area-load studies, and 150 area-load studies requiring 750 man-days; 23 cost-allocation studies requiring 310 man-days; power statistics of loads and load growth requiring 500 man-days; 15 series of contract analyses requiring 310 man-days; rate formulation and analysis requiring 250 man-days.

Purchase of Power and Rental of Facilities

We are this year requesting $1,390,000 for purchase of power and rental of facilities. The amount of the fund is determined on the basis of estimates of payments under existing wheeling and firming contract with Virginia Electric & Power Co. and contracts now being negotiated with the Carolina Power & Light Co. and the Appalachian Electric & Power Co. Contracts have been completed with the Greenwood County Electric Power Commission and South Carolina Public Service Authority which contain provisions for the sale of surplus steam energy to the Government. In many cases it is possible to use surplus capacity in the transmission system of the utilities to deliver power to the Government's customers at a saving in cost to the Government and with extra earnings to the utility. Based on a conservative estimate of the rate at which customers will be obtained by the Government, requiring purchase of energy and payment for transmission, and on an estimate of favorable water conditions, the amount stated will be adequate for fiscal year 1954. With less favorable water conditions or a more rapid increase in Government-customer load, it will be necessary to request additional funds during the year.

Due to the expansion of operation, marketing, and engineering activities, the administrative responsibilities are accordingly increased requiring a larger staff to perform the additional workload.

Altogether it will be necessary to expand the regular organization under the operation-and-maintenance item of the administration from 55 people, approved for 1953, to a permanent staff of 72 employees during the fiscal year 1954.

Operation and Maintenance

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$200,000	$760,000	$1,740,000
Transferred from "Construction, Southeastern Power Administration," pursuant to Public Law 375	16,000		
Adjusted appropriation or estimate	216,000	760,000	1,740,000
Reimbursements from other accounts	1,697		
Total available for obligation	217,697	760,000	1,740,000
Unobligated balance, estimated savings	−101		
Obligations incurred	217,596	760,000	1,740,000

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
1. System operation and maintenance	$24,774	$51,200	$100,000
2. Power marketing	101,143	113,500	150,000
3. Purchase of power and rental of facilities		495,000	1,390,000
4. General administration	89,982	100,300	100,000
Total direct obligations	215,899	760,000	1,740,000
Obligations Payable Out of Reimbursements From Other Accounts			
4. General administration	1,697		
Obligations incurred	217,596	760,000	1,740,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	37	55	72
Full-time equivalent of all other positions		1	
Average number of all employees	30	41	56
Average salaries and grades:			
General schedule grades:			
Average salary	$4,935	$4,995	$4,911
Average grade	GS–7.5	GS–7.3	GS–7.6
Direct Obligations			
01 Personal services:			
Permanent positions	$154,797	$216,000	$296,000
Part-time and temporary positions		2,000	
Regular pay in excess of 52-week base	738	1,000	1,500
Payment to other agencies for reimbursable details		5,000	2,500
Total personal services	155,535	224,000	300,000
02 Travel	11,616	15,000	17,000
03 Transportation of things	238	3,000	3,000
04 Communication services	2,742	8,000	8,000
05 Rents and utility services	5,704	2,000	2,000
06 Printing and reproduction	340	1,000	1,000
07 Other contractual services	1,977	499,000	1,394,000
Services performed by other agencies	1,249	2,000	2,000
08 Supplies and materials	13,167	3,000	5,000
09 Equipment	22,674	3,000	8,000
15 Taxes and assessments	657		
Total direct obligations	215,899	760,000	1,740,000
Obligations Payable Out of Reimbursements From Other Accounts			
09 Equipment	1,697		
Obligations incurred	217,596	760,000	1,740,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$32,522	$36,629	$156,629
Obligations incurred during the year	217,596	760,000	1,740,000
	250,118	796,629	1,896,629
Deduct:			
Reimbursable obligations	1,697		
Unliquidated obligations, end of year	36,629	156,629	306,629
Total expenditures	211,792	640,000	1,590,000
Expenditures are distributed as follows:			
Out of current authorizations	182,548	603,371	1,433,371
Out of prior authorizations	29,244	36,629	156,629

Mr. LEAVY. Our budget request consists, of course, of the two items. One is the "Operation and maintenance" item, and the other is the "Construction" item.

I think I might, first, outline the request for "Operation and maintenance."

The amount requested in the budget, as it has been presented, is $1,740,000. That is an increase of $983,000 over the amount which was appropriated for fiscal year 1953.

That item consists actually of two rather different needs for appropriations. It covers the actual operation of the headquarters of the agency and it also includes a substantial amount for payment of wheeling fees and the purchase of firming energy.

The request, as it stands, actually includes $350,000 for the operation of the headquarters office. That compares with $265,000——

Mr. JENSEN. Will you give me those figures again?

PURCHASE OF ENERGY, AND WHEELING CHARGES

Mr. LEAVY. $350,000 of the O. and M. request is for the actual operation of the headquarters office; and that, as I say, compares with $265,000 out of the fiscal-year-1953 appropriation. The balance of $1,390,000 is as I say, for the purchase of firming energy and for the payment of wheeling fees. The breakdown of that shows $618,000 needed for the payment of wheeling fees and $772,000 for the purchase of firming energy. The bulk of each of those items is related to the Kerr project. Practically all of the requirements for firming energy are related to the Kerr project, and the major part of the wheeling requirement is related to that project.

The amount for the wheeling fee is, of course, a relatively fixed amount, since it would depend upon the size of the loads of the customers—preferred agencies contracting with the Government.

On the other hand, the requirement for purchase of firming energy may vary widely, since water conditions will determine the amount that is required. An extremely dry year will require a quite heavy purchase, and a very favorable water year would reduce the amount of purchases substantially. The amount that is requested is based on less than a median water year. In other words, it assumes that water conditions during the fiscal year 1954 will be rather favorable, and on that basis the amount requested will be sufficient. As I mentioned

most of that amount is related to the Kerr project, and the assumption has been made in determining that amount that the one-third capacity of that project which has not yet been marketed will be marketed on the same basis as the two-thirds which has been provided for in the contract with Virginia Electric & Power Co. The requirements for firming and wheeling, so far as they relate to the two-thirds now marketed, are requirements under the Virginia Electric & Power Co. contract that has been executed and which is now in operation.

Mr. JENSEN. At this point, I would like to have inserted in the record the estimate of expenditures of the $1,390,000 on page 44 of the justifications.

(The matter referred to is as follows:)

It is estimated that the expenditure of the $1,390,000 will be distributed as follows:

	Wheeling fee	Purchase of energy	Total
John H. Kerr project:			
Virginia Electric & Power Co	$311,000	$508,000	$819,000
Carolina Power & Light Co	156,000	254,000	410,000
Philpott project: Appalachian Electric Power Co	10,000	10,000	20,000
Clark Hill project: Duke Power Co. (or Georgia Power Co.)	141,000	0	141,000
Total	618,000	772,000	1,390,000

Mr. JENSEN. I want the 1953 figures for the same items inserted in the record also.

(The matter referred to is as follows:)

Estimated expenditures for wheeling and purchase of energy, fiscal year 1953

	Wheeling fee	Purchase of energy	Total
John H. Kerr project:			
Virginia Electric & Power Co	$168,600	$131,000	$299,600
Carolina Power & Light Co [1]	13,200	12,700	25,900
Total	181,800	143,700	325,500

[1] Depends on contracts yet to be negotiated.

OPERATION OF THE HEADQUARTERS OFFICE

Mr. LEAVY. The balance of the request for O. and M. funds is, as I say, to be applied to the operation of the headquarters office. The amount requested represents a small increase over the amount which was appropriated for fiscal year 1953. It would probably not provide for the addition of personnel over and above the personnel authorized for fiscal year 1953. In other words, the present staff does not include the filling of all the positions that were authorized for fiscal 1953. If the present staff were retained, based on the annual requirement for salary funds, the amount requested would permit the retention of the present staff and the filling of the few authorized positions for 1953 which have not been filled.

I believe that the needs of the headquarters office can be illustrated by some explanation of the growth of the responsibilities of the agency.

SCOPE OF OPERATION AND REVENUES

In the fiscal year 1952 there were 4 plants operating with a nameplate capacity of 346,000 kilowatts and 2 customers being served. For fiscal year 1953, there are 7 plants in operation, and the amount of capacity has almost doubled. It has reached 619,000 kilowatts, and the number of customers served is estimated by the end of the fiscal year to be 19. For fiscal year 1954, the same 7 plants will be in operation, but the installations at the plants will have progressed to the point that the amount of capacity to be marketed will have increased by approximately 50 percent and will amount to 919,000 kilowatts. It is estimated that the number of customers served will aggregate 73, showing a very substantial increase in that responsibility. Likewise, very substantial increase in the revenues of the agency will occur in 1954. The estimate for fiscal year 1953 is that revenues will total $7,319,000. It is estimated that in fiscal 1954 the revenues of the agency will be $13 million.

I have a tabulation here of the revenues that have been collected by the agency and these estimates; and, if you will permit me, I would like to put that in the record.

Mr. JENSEN. That is a record of the revenues received?

Mr. LEAVY. Of actual revenues to date and the estimate for future revenues.

Mr. JENSEN. Yes; we will insert that in the record, without objection.

I think, also, you should put in the record the table showing operation and maintenance costs for 1952 and 1953 and the estimates for 1954.

Can you add the operation and maintenance costs to those figures?

Mr. LEAVY. Do you mean the total operation and maintenance figure?

Mr. JENSEN. That is right.

Mr. LEAVY. Well, for 1953, it is $760,000 and for 1954 the estimate is $1,740,000 and, as I say, the bulk of that increase is accounted for in the request for funds for payment of wheeling fees and payment for firming energy.

Mr. JENSEN. I do not believe you gave the figures for 1952, did you?

Mr. LEAVY. I did not give the figure for 1952.

Do you have that available, Mr. Burt?

Well, in order not to hold this up, we can supply that for the record.

(The matter referred to is as follows:)

Southeastern Power Administration power revenues and costs

ACTUAL		OPERATION AND MAINTENANCE COST	
Fiscal year 1949	$295, 700. 00		
Fiscal year 1950	1, 033, 881. 07		
Fiscal year 1951	2, 458, 469. 50		
Fiscal year 1952	5, 285, 475. 50	Fiscal year 1952	$217, 596
ESTIMATED			
Fiscal year 1953	$7, 319, 000. 00	Fiscal year 1953	760, 000
Fiscal year 1954	13, 000, 000. 00	Fiscal year 1954	1, 740, 000
Fiscal year 1955	14, 800, 000. 00		

Mr. LEAVY. The substantial increase, both in the amount of power to be marketed and in the number of customers to be served, as well as the increase in revenues, is a good indication of the increase in the responsibility of the Agency, and is the basis on which some slight increase in operation and management funds has been requested.

I believe it might be helpful to the committee in appraising the work to be done, if I would briefly relate the status of marketing on the various projects and the problems that remain ahead so far as contract negotiations and arrangements are concerned.

Mr. JENSEN. Right there, just how much more are you asking for operation and maintenance and for administrative costs for 1954 than you had in 1953?

Mr. LEAVY. Well, the total increase is $983,000, as shown on this chart.

Mr. JENSEN. For what?

Mr. LEAVY. That is for the operation of the headquarters office and the purchase of power and rental of facilities.

Mr. JENSEN. How much is that? Give us that again.

Mr. LEAVY. $983,000.

Mr. JENSEN. That is made up in four items: System operation and maintenance, $48,800; power marketing, $36,500; purchase of power and rental of facilities, $895,000; and general administration, $2,700?

Mr. LEAVY. That is correct, sir.

Mr. JENSEN. Go ahead, Mr. Leavy.

THE KERR PROJECT

Mr. LEAVY. The Kerr project on the Roanoke River in Virginia is now in operation. Three of the six units have been installed and are in operation and the Government has a contract with the Virginia Electric & Power Co., which provides for the marketing of two-thirds of the capacity of that plant. A portion of that capacity is sold to the company and 60,000 kilowatts of that two-thirds of the capacity is available for marketing to preferred agencies.

CONTRACT WITH VIRGINIA ELECTRIC POWER CO.

Contracts have been entered into with the cooperatives in Virginia in the VEPCO service area and they are presently being served under those contracts with the Government through the wheeling and firming contract which the Government has with the company.

Under the contract, the company takes the power at the plant and transmits the power to the preferred agencies who have contracted with the Government. The Government pays the company a wheeling fee for each kilowatt-hour that is so transmitted.

Mr. JENSEN. What is that fee?

Mr. LEAVY. The fee is 1 mill for delivery points which are within 100 miles of the project, and it is 1¾ mills for delivery points which are outside of the 100-mile circle, but within a 150-mile circle.

In addition, the company sells to the Government, if needed, firming energy from their steam plants. The Government pays the company the average fuel cost for off-peak energy that is sold to the

Government, and average production cost plus one-half mill for on-peak energy that is sold. That contract is the only wheeling contract that Southeastern has with any of the companies in the Southeast. It was in the process of negotiation for 1½ years, and was a product of, as you can see, very, very lengthy and intensive negotiations, but it is, we feel, a contract that benefits the preferred agencies, the Government and the company as well.

CAROLINA POWER & LIGHT CO. CONTRACT

We have attempted, and it is our wish, to enter into a similar contract for the remaining one-third of the Kerr project with the Carolina Power & Light Co. We are in the process of negotiating with that company and they have, I may say, not indicated that they will be willing to wheel power for the Government on the same basis as VEPCO. They have made a proposal for the outright sale to the company of the balance of the power in the project. However, we are hopeful that we can continue negotiations and ultimately reach agreement on a wheeling and firming contract. That, however, is one of the major jobs ahead of us for the balance of this fiscal year and the next fiscal year.

Mr. JENSEN. Have you offered them a contract similar to the Virginia Power & Light Co. contract?

Mr. LEAVY. Yes, sir; we offered them a contract that was patterned precisely after the Virginia contract, with the understanding that technical and operating matters might be adjusted to suit the particular situation of that company.

Mr. JENSEN. Just what different provisions does the Virginia contract have that are not present in the offer made to the Carolina Power Co.?

Mr. LEAVY. We are seeking one with Carolina patterned after the one in Virginia.

Mr. JENSEN. In just what way does your Carolina Power proposed contract differ—just what different proposal has the Carolina Power & Light Co. offered, as against the contract you have with the Virginia Electric & Power Co.? What is the difference in the two—their proposal and the contract you have with the Virginia Light & Power Co.?

Mr. LEAVY. The Virginia contract provides that the company will wheel power for the Government and sell the Government firming energy and that the Government will contract with preferred agencies by means of that wheeling and firming contract. These preferred agencies will be customers of the Government to the extent that the Government has power available to supply their needs.

Under the proposal which is made by the Carolina Power & Light Co., the first alternative proposal made by the company was simply that the remaining power in the Kerr project be sold outright to the company with no further provision as to the use the company might make of the power, and the other alternative proposal is somewhat similar to that which has been made by the Georgia Power Co., in that the company would purchase outright at the bus bar all of the power sold in its service area and would resell that power to the pre-

ferred agencies and the preferred agencies would be the customers of the company.

Under the Carolina Power & Light proposal the company would agree to resell the power to the preferred agencies at the price which they paid, but the Government would be required to pay the company a fee for transmission of that power. Under their proposal the Government would pay the company's transmission costs for the transmission of the company's power. As I say, the Carolina Co. has not said that they will contract on no other basis and we are hopeful that an agreement can be reached on the basis of the VEPCO contract.

Now, if an agreement is reached with Carolina Light & Power Co., that would take care, or would be the avenue for the marketing of the balance of the Kerr project power.

AGREEMENT WITH APPALACHIAN POWER CO.

The Philpott project in Virginia is scheduled to commence operations next May. It is a small project—14,000 kilowatts—and, we have not actually executed a contract covering the wheeling and firming of that power. We have general agreement with the Appalachian Power Co. that they will wheel the power, and we still have the job remaining of negotiating the actual terms of the contract.

Mr. JENSEN. You are also negotiating with the Georgia Power Co., are you not?

CLARK HILL-GREENWOOD LINE

Mr. LEAVY. I would like to explain that Clark Hill situation. The Clark Hill project on the Savannah River now has 2 units in operation. The Government presently has 2 contracts for the sale of power from that plant.

One is the contract that was executed almost 2 years ago with the Greenwood County Electric Power Commission, which is a State agency, which provides for the sale of 5,000 kilowatts of power to the Commission, with an option on the part of the Commission to purchase an additional 5,000 kilowatts. We also have a contract with the South Carolina Public Service Authority, which is also a State agency and a preferred agency, which provides for the sale of 40,000 kilowatts of power from the Clark Hill project.

We have reached agreement on an amendment to that contract which would increase the amount of power sold to the authority to a total of 85,000 kilowatts. That agreement has not yet become operative, since it is presently before the Department for approval, but if it is approved, it will mean that substantially all of what might be regarded as the South Carolina share of power from Clark Hill will be marketed to the two preferred agencies.

These preferred agencies, I might say, will themselves serve substantially all of the cooperatives in the State of South Carolina. The balance of the power to be marketed from the Clark Hill project, as it becomes available, would be expected to go to supply needs in the State of Georgia.

GEORGIA POWER CO. CONTRACT

It has always been our desire to enter into a contract with the Georgia Power Co. similar to the contract which we have with Virginia Electric & Power Co. and similar to the type of wheeling contracts that have been entered into in other parts of the country.

The Georgia Power Co. has, almost from the day of the establishment of Southeastern, insisted on pressing a proposal which they made, which would provide for the outright sale to the company at the bus bar of the power from Clark Hill and other Federal projects in their service area, with provision that the company would resell this power, after adding a transmission fee, to the preferred agencies.

The result of that, of course, would be that the preferred agencies would have no choice in the matter of their power supply, and they would have no opportunity to contract directly with the Government, if they wished to.

It would also have the effect, since the company does add a transmission fee to the price it paid for the power, of having a preferred agency in Georgia paying the company a higher price for power that came from Clark Hill than the preferred agencies in South Carolina were paying the Government.

It would also have the effect that the company, a non-preferred agency, would buy Clark Hill power at the Government established rate and the cooperatives, who are preferred agencies, in order to get that Clark Hill power from the company, would be required to pay a somewhat higher rate. In any event, that proposal has not been accepted by the Government, and was on several occasions rejected by the Government.

It is my understanding that the company has again tendered the proposal to the Secretary of the Interior and that the matter is under consideration by him.

That situation is the difficult situation we have to deal with in marketing the balance of the Clark Hill power, and if that were resolved, that would have taken care of the main problems in marketing Clark Hill power.

JIM WOODRUFF PROJECT

The other project which is under construction and scheduled for operation in about a year and a half is the Jim Woodruff project in Florida, and the power companies near that project are the Gulf Power Co., Alabama Power Co., and the Florida Power Corp. The Gulf and Alabama Co.'s, are sister companies of the Georgia Power Co., that is, all three of those companies are subsidiaries of the Southern Co., and the proposals which have been made by those companies are similar to the Georgia Power proposal.

The Florida Power Corp. has also made a somewhat similar proposal, but has not pressed the proposal as vigorously as the Georgia Power Co. and has not expressed itself as definitely being unwilling to wheel power, as the Georgia Power Co. has done.

STATUS OF THE CLARK HILL-GREENWOOD LINE

Mr. JENSEN. What is the status of the Clark Hill-Greenwood line?

Mr. LEAVY. As you will recall, the Government commenced construction of that line a year ago last January and had done some

preliminary work at the time we appeared before this committee last year.

The 1953 Appropriation Act appropriated funds for the completion of construction of the line, subject to a proviso which, in effect, said that the funds appropriated would not be available unless the affected power companies in the area refused to enter into a systemwide wheeling contract, and the Secretary of the Interior so notified Congress.

When that act became effective, work on the line was suspended for more than 2 months, during which time efforts were made to determine whether or not the 2 power companies in South Carolina, the South Carolina Electric & Gas Co., and the Duke Power Co., would wheel power.

Southeastern sent telegrams to those companies asking them if they would be willing to wheel power and both companies sent back very equivocal replies that seemed to indicate that they were not willing to execute contracts for wheeling. A second telegram was sent to each of the companies, and the South Carolina Electric & Gas Co. did unequivocally say they would be willing to wheel power. The other power company again equivocated, and a third telegram was sent to the Duke Power Co., and the response was similar to the earlier responses. Based on that exchange of telegrams, the Secretary notified the Congress that it was his finding that the Duke Power Co. was the affected power company and that it had refused to enter into a contract for wheeling, and that, therefore, the funds were available for expenditure. The work on the line was then resumed.

During last fall a request was made that the Comptroller General rule upon the propriety of these expenditures, and as a result of that request certain information was furnished the Comptroller General and he reached the decision early in January that the proviso in the act had not been complied with and that the expenditures were not proper. He, in effect, substituted his judgment for the judgment of the Secretary and reached a different conclusion than the Secretary of of the Interior had reached.

Concurrently with this, the Duke Power Co. and the South Carolina Electric & Gas Co. brought suit in the State Courts of Georgia on, I believe, November 18 of last year, seeking to enjoin the construction of the line.

The suit was brought against the Administrator of Southeastern Power Administration and the construction contractor, who had received the low bid to build the line.

That suit was removed to the Federal court, and a preliminary hearing was held early in January on the question of whether a temporary injunction should be issued, pending a hearing—a final hearing—on the question of whether a permanent injunction should issue. The State court had issued a temporary restraining order which permitted construction on the line to proceed, except for the last mile of the line, on the theory, I believe, that if construction of the line would damage the company, it would not be the construction as such, but the completion and operation of the line.

That restraining order remained in effect after removal to the Federal court until late in January when the Federal court issued a temporary injunction, which enjoined both the contractor and the Government from doing any act in furtherance of construction of that line.

At the time of the Comptroller's ruling, obviously, the Government could not proceed further in connection with the construction of the line, since he had ruled, in effect, that there were no funds available. However, the work had progressed so far that the contractor on his own initiative continued construction of the line since he had moved his crews into the area; he had his material on the ground and was in the process of actually erecting the line. So, following the Comptroller's decision, work was continued on the line by the contractor himself, although the Government had not asked that, nor did it participate in it.

When the Federal court issued its temporary injunction, that, of course, stopped the contractor, and since that time nothing whatever has been done on the line, and it remains in a partially completed state.

Of the 36 miles, there are, I believe, approximately 15 miles of poles set, the right-of-way is all cleared, most of the holes are dug, and the materials are on the right-of-way, and some 6 or 7 miles of wire have actually been strung.

The Greenwood Commission, which, of course, is the agency most directly concerned with this line since it was for the purpose of serving them, has expressed its desire to take over the line and complete it, and they are financially able to do so. So far as I know, no final determination has been made within the Department as to what disposition will be made of the line, but I should imagine that it is likely that the line may be transferred to the Greenwood Commission, since they want the line, and they are able to buy it, and they are the only agency directly affected by the line.

Mr. JENSEN. Will you describe the Greenwood Commission?

Mr. LEAVY. The Greenwood Commission is established under a special statute of the State of South Carolina and they are, as I say, a State agency. They have a five-man commission that operates as their board of directors, so to speak. Their headquarters are in Greenwood, S. C., and they are the source of power for four counties in that area. The Commission itself has a hydroelectric generating plant and a steam generating plant.

Mr. JENSEN. At Greenwood?

Mr. LEAVY. The Greenwood Commission has those facilities, and it also operates a rural distribution system, which is financed by REA, and in addition to that, it is the wholesale supplier for, I believe, two other REA cooperatives, some 4 or 5 municipal systems and several industrial customers. The Commission's situation is that their load is outstripping their own generating capacity, and they wish to purchase Clark Hill power from the Government rather than to install additional generating capacity.

In view of the work that does remain to be done on this marketing, it is our feeling that the slight increase in O. and M. funds that we are requesting is an increase that is justified and is needed. We feel that with expected revenues of $13 million for next year, it is necessary for the best protection of the interests of the Government, that we have available whatever staff is necessary to carry on this work expeditiously.

AUTHORITY FOR PURCHASE OF ENERGY

Mr. JENSEN. Do you consider section 5 of the Flood Control Act of 1944 as sufficient authority to purchase power and rent facilities?

Mr. LEAVY. Yes, sir; we do. We, of course, have been influenced by the fact that this program has been followed in the past and that apparently it has been sanctioned by the Congress, since appropriations have been made for these purposes. With respect to wheeling we have actually been directed by Congress to seek those agreements, and in order to make them effective we must have funds to pay wheeling fees.

I might also mention that there was never any question raised in our negotiations with Vepco, and the company itself did not raise questions, as to our legal authority to enter into that type of agreement. They, I think, before this committee, expressed some preference for other arrangements, but it was not on the basis of a contention that there was no authority under section 5 to enter into a wheeling and firming agreement.

Mr. JENSEN. So, the authority has not been challenged and the Southeastern Power Administration has not been challenged actually by anyone so far as your authority is concerned to purchase power and rent facilities?

Mr. LEAVY. So far as I can recall, I am sure it has never been challenged in any statements to us. Now, I would not want to state categorically that no company has ever before a committee raised some question about it. The only company with whom we have entered into an agreement covering that has not raised the question.

CONSTRUCTION

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$318,500	$959,500	$6,700,000
Transferred to "Operation and maintenance, Southeastern Power Administration," pursuant to Public Law 375	−16,000		
Adjusted appropriation or estimate	302,500	959,500	6,700,000
Prior year balance available	1,752,334	60,331	
Recovery of prior year obligations	13,409		
Total available for obligation	2,068,243	1,019,831	6,700,000
Balance available in subsequent year	−60,331		
Carried to surplus, Public Law 136	−1,765,743		
Obligations incurred	242,169	1,019,831	6,700,000

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
1. Construction in progress		$904,831	
2. New construction and additions	$242,169	115,000	$6,700,000
Obligations incurred	242,169	1,019,831	6,700,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	12	32	347
Full-time equivalent of all other positions	2	3	39
Average number of all employees	13	29	317
Average salaries and grades:			
General schedule grades:			
Average salary	$3,666	$3,875	$3,905
Average grade	GS-5.2	GS-5.6	GS-5.8
01 Personal services:			
Permanent positions	$35,876	$98,747	$1,086,000
Part-time and temporary positions	5,445	6,240	250,000
Regular pay in excess of 52-week base			4,000
Payment above basic rates			40,000
Payment to other agencies for reimbursable details			120,000
Total personal services	41,321	104,987	1,500,000
02 Travel	7,893	35,000	443,000
03 Transportation of things	692	11,000	300,000
04 Communication services	596	15,000	90,000
05 Rents and utility services	435	2,000	70,000
06 Printing and reproduction	87	3,000	32,000
07 Other contractual services	1,840	39,194	90,000
Services performed by other agencies		3,000	120,000
08 Supplies and materials	3,654	21,650	90,000
09 Equipment	3,648	50,000	230,000
10 Lands and structures	181,557	735,000	3,735,000
15 Taxes and assessments	446		
Obligations incurred	242,169	1,019,831	6,700,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$46,421	$195,287	$415,118
Obligations incurred during the year	242,169	1,019,831	6,700,000
	288,590	1,215,118	7,115,118
Deduct:			
Adjustment in obligations of prior years	13,409		
Unliquidated obligations, end of year	195,287	415,118	3,115,118
Total expenditures	79,894	800,000	4,000,000
Expenditures are distributed as follows:			
Out of current authorizations	79,894	605,430	3,600,000
Out of prior authorizations		194,570	400,000

REVISED BUDGET ESTIMATE

Mr. JENSEN. Turning to construction, I believe you are aware that the revised budget does not provide for any funds for new construction?

Mr. LEAVY. Yes, sir. I would like to say that it is my understanding of the way in which this reexamination of the budget takes place, is that the departments will make their own reexamination, which is then submitted to the Bureau of the Budget; and it is my understanding that Interior—or at least so far as Southeastern is concerned—the Department has made its review, although that has not received final approval of the Bureau of the Budget.

Mr. JENSEN. But the recommendation has been made by the Interior Department officials, in the proper and regular manner, to the Budget Bureau, that no new construction money is to be provided in this bill. Did they recommend that any construction money whatsoever be appropriated for fiscal year 1954?

Mr. LEAVY. Yes; they did, sir. Let me mention in that connection that I understand also that the Department did recommend a reduction of $25,000 in the O. and M. fund, so that, although the book shows for the operation of the headquarters office $350,000, there would be only $325,000 under the Department's revision, which reduces the request by that amount.

With respect to construction, the program originally presented totaled $6,700,000, which included amounts for the construction of a number of lines, or commencement of construction of a number of lines. It included $300,000 for future planning and $230,000 for general plant. The revision of the budget that has been made eliminated the "Construction" item as such and the items related actually to the construction of lines. It eliminated the "General plant" item and retains only a $200,000 item for "Future planning." That "planning" item is the only portion of the original "Construction request that remains, and that is for $200,000.

Mr. JENSEN. Will you state why you think the $200,000 is necessary for planning purposes?

PROPOSED FACILITIES FOR WHICH PLANNING MONEY IS NEEDED

Mr. LEAVY. In order to give the committee some basis for appraising it, I think I have to state generally the nature of some of the transmission facilities that have been proposed, and which I assume will be reconsidered by the Department in the future.

The facilities proposed consist partially of facilities for direct service to customers where we have been unable to secure wheeling agreements. They were facilities that would not be needed and would not be built if wheeling agreements could be secured.

There were also proposed facilities for the tying together, physically, of these Government projects so that the operation of the projects could be integrated, and that is something that we have felt would be desirable, irrespective of whether the companies agree to wheel or not. The advance planning money which is requested would be devoted to preliminary planning on these various types of facilities. It would include necessary engineering calculations, board studies and studies of operations of the various plants, and preliminary surveys in order to determine the best line locations and to determine the terrain which must be followed in order that some sound appraisal could be made of the cost of the facilities and of the economic and engineering benefits.

INTEGRATION OF POWERPLANTS

I might say that the preliminary studies that have been made indicate that if the Government's plants, including some that are not presently under construction, could be integrated, there would be a very substantial benefit to the Government.

The plants in the Savannah Basin in Georgia are high-head storage plants which have a large amount of capacity, but which are deficient in energy during dry years. On the other hand, the plants which are proposed for the Alabama-Coosa Apalachicola Basins—only one of which is presently under construction and that is Jim Woodruff, but there are other additional authorized plants—are more or less run-of-

the-river plants. They have a substantial amount of energy, but during periods of high water lose in some cases all or in other cases a large portion of their capacity, simply by the high water's raising the tailwater below the dam and reducing the available head. The result is that, operated as isolated plants, they have little dependable capacity.

The plants which we have considered involve Clark Hill, which is in operation; Hartwell, which is authorized but not under construction; Buford, which is in north and central Georgia, which is under construction; Allatoona, which is in operation; Jim Woodruff, which is under construction, and Upper Columbia, Howell Mill Shoals, Miller's Ferry, and Jones Bluff, which are all authorized but not under construction. If that group of plants is operated on an isolated basis, they have a dependable capacity of approximately 700,000 kilowatts.

Now, it appears that the two types of plants, if they are operated as an integrated operation, will serve to complement each other at times of high water when the plants in the western basin are flooded out. So far as capacity is concerned, the plants in the Savannah or the eastern basins will have ample capacity to take care of the other plants during that period of high water. The plants in the western basins, in turn, can benefit the highhead plants, since they have substantially greater amounts of energy which can be used in a sense to firm up the plants in the Savannah and the other eastern basins.

Our preliminary studies indicate that, if those plants at the time they all become operating plants were tied together by 230-kilovolts transmission grid and operated on an integrated basis, the 700,000 kilowatts of dependable capacity which they have as isolated plants would be increased by approximately one-half million kilowatts.

Assuming that increase in dependable capacity is marketed at 75 cents a kilowatt a month, our studies show that the increase in revenue to the Government would be adequate to pay the annual cost of the integrating transmission, as well as to return a surplus of in excess of $1 million a year.

That proposal is under review but, of course, not before the committee, but I think it is relevant for the committee to consider it, since I think it is the most important part of the justifications for planning funds.

FURTHER STUDIES NEEDED

We have made these preliminary studies, but there should be further studies of the operations and of the engineering aspects concerning line construction and determination of costs that would be necessary, so that, if in the future it should be determined that some such program would be presented to the Congress, we would be in a position to give the Congress a complete study and complete basis for appraising the merits of the proposal.

POSSIBILITY OF ADDITIONAL CONSTRUCTION

Mr. JENSEN. You are, I believe, attempting to justify some of the construction items that the Interior Department has recommended against building at this time, are you not?

Mr. LEAVY. Well, it is my understanding, sir, that the Department has not passed final judgment on these items. It is not now determining that the items should not now or ever be constructed, but is simply seeking an opportunity for them to make their own appraisal as to whether they should be or not.

Mr. JENSEN. I see.

Mr. LEAVY. On that supposition it is, of course, possible that they might determine that funds should be requested for some facilities.

Mr. JENSEN. You mean at some future time?

Mr. LEAVY. Yes, at some future time.

Mr. JENSEN. By full cooperation between the Southeastern Power Administration, the private power companies and the municipalities in your area, and a complete integration of all of the power producing facilities of all of those agencies, whether they be private or Federal, is it not possible to give everyone adequate power facilities at reason able rates without the building of these projects which the Interior Department has recommended not be built at this time?

Mr. LEAVY. Well, so far as facilities for direct service to these customers are concerned, those generally would not be needed if the companies in the area were willing to enter into wheeling contracts such as VEPCO has entered into.

We recognize that it is desirable and it is necessary, if the region is to benefit to the maximum, that these plants be operated on an integrated basis with other generating facilities in the area, irrespective of whether they are publicly owned or privately owned. However, we are concerned that in any such arrangements the benefits do not all go to any one group, to a private company, for example.

It is our feeling that some of the proposals which have been made would mean that the bulk of the benefits would inure to the private company.

We feel that the arrangement that we have with VEPCO for wheeling and permitting the sale of some power to the company more or less divides up the benefits. The Government benefits by being able to serve preferred customers, as it is directed to do in section 5, and it benefits by being able to market all of the power from the project on a basis that will pay out the project. The companies benefit by the integration of the operation of this hydro plant into the operation of their steam system and by the ability to purchase some capacity from the Government, and the preferred agencies benefit by being able to purchase Government power at a rather substantial saving over the rates they had previously paid.

We feel an arrangement such as that, that in effect divides benefits up among all the participating parties is wholly desirable, but we are fearful of arrangements which would not give a proper share of benefits to the preferred agencies and to the general public.

LEASING OF FACILITIES

Mr. JENSEN. Have you executed any leases for REA facilities?

Mr. LEAVY. We have executed an agreement with the Alabama Electric Cooperative, which is a generating and transmission cooperative operating in the southern part of Alabama, which would provide for the lease of a facility to be constructed by that cooperative.

That contract has been executed, but has not received departmental approval, so I cannot say whether the contract will become effective and operative or not. That is the only situation of that kind we have, however.

RULING OF ARKANSAS SUPREME COURT

Mr. JENSEN. I suppose you are aware of the ruling of the Arkansas Supreme Court on a matter of like nature.

Mr. LEAVY. I am aware of it. I cannot say that I am thoroughly familiar with it, sir.

Mr. JENSEN. As I understand, there was a problem involving the Southwestern Power Administration of a comparable nature, and the Supreme Court of the State of Arkansas ruled against the Southwestern Power Administration entering into such a lease with the REA's in that State.

PERSONNEL

How many people do you have employed at the present time?

Mr. LEAVY. What is the exact number, Mr. Burt?

Mr. BURT. Eighty.

Mr. JENSEN. Eighty?

Mr. LEAVY. Yes. Of this number, the balance over 52 are people who are employed on temporary appointments. They were employed in connection with the Greenwood construction and the planning money.

Mr. JENSEN. Should the Congress see fit to go along with the recommendations of the Interior Department that no construction be provided, how much would that affect your personnel, and would you like to make a recommendation as to the number of people that you could get along without?

Mr. LEAVY. Well, based on the revised request for funds, the $200,000 planning money, and the reduced amount for operation of the office, I would roughly guess that those requests would permit very little increase. They would pretty much take care of the present staff of the organization.

Mr. JENSEN. That is not quite an answer.

Mr. LEAVY. I realize that I have not become responsive yet; I am trying to get to that.

If the Congress decides that planning money should be appropriated, then it will be necessary to retain the staff that is working on that now, and continue that work if the determination is made that appropriations should be made for that purpose. So far as the O. and M. money is concerned it would be very difficult to reduce the present staff.

Obviously, reductions could be made, but to the extent that they are made it would mean that work would probably go undone that should be done.

We have a big job to do, so far as marketing is concerned, and we are still badly behind on a great many things.

As I have indicated, there are very important negotiations that lie ahead of us and, for example, a great deal of work remains to be done on repayment schedules and rate approvals on the project.

Now, to the extent that the present staff is reduced, I believe that that work will simply lag further. I feel that the staff that is requested is needed there.

CUSTOMERS

Mr. JENSEN. I believe you are marketing power to seven companies. That is, seven organizations market power from these dams, is that right?

Mr. LEAVY. No, sir.

We have actually two contracts for the sale of Clark Hill power, with the Greenwood County Electric Power Commission and the South Carolina Public Service Authority.

We have a contract with the Virginia Electric & Power Co., and we have contracts with 11 cooperatives in Virginia who are served through that wheeling agreement.

We also have a contract on the Cumberland projects with TVA, and one with the Georgia Power Co. on Allatoona.

When wheeling agreements can be entered into with the other companies there will then be a large number of contracts to be entered into with the preferred agencies which would be served through those wheeling agreements.

In the State of Georgia, for example, there are 37 cooperatives which would be potential customers. The majority of those cooperatives have already entered into conditional contracts with the Government for providing service to them if we are able to get wheeling agreements with the company.

NUMBER OF BILLS SENT TO CUSTOMERS

Mr. JENSEN. Let me ask you this question: How many bills for power must you send out each month to people who get your power at the present time?

Mr. LEAVY. At the present time there would be an annual bill rendered to TVA, and monthly bills rendered to the Georgia Power Co., the Virginia Electric & Power Co., the South Carolina Public Service Authority, and the 11 cooperatives in Virginia with whom we have contracts.

Mr. JENSEN. You simply tell the REA's how many kilowatts of power they have received off of your lines at the end of the month, and they in turn, bill their REA customers, is that right? That is, you simply send a bill once a month to the respective REA's which purchase your power?

Mr. LEAVY. That is correct.

Mr. JENSEN. So, in effect, you only have a few bills each month to render.

Mr. LEAVY. Well, as of now it would be probably about 15. However, that is an amount that should increase very substantially if we are able to make wheeling arrangements for selling the balance of the power. However, I think it should be mentioned that the actual job of billing is a relatively minor part of the work that needs to be done.

FUNCTIONS OF OFFICE EMPLOYEES

Mr. JENSEN. What are the things that take most of your time in your office, so far as clerical help is concerned? How many people do you have in the office doing clerical work?

Mr. LEAVY. What is that number, Mr. Burt?

Mr. BURT. It is about 12.

Mr. JENSEN. What are the rest of them doing? Can you give us a breakdown of just what they do?

Mr. LEAVY. We have four divisions. In the first place, we have the Office of the Administrator which consists simply of three people.

Mr. JENSEN. That is you and who else?

Mr. LEAVY. Mr. Bush, who is my assistant, and my secretary.

Mr. JENSEN. Yes.

Mr. LEAVY. We have the Office of the Chief Counsel. The chief counsel's job is not filled. It has been vacant since I was moved out of that job, and we have three attorneys in that Division.

We have four functional divisions in the organization. One is the Division of Administration, which is responsible for the administrative work, personnel work, the accounting work, the payroll work, the vouchers, the budget work and procurement work and various administrative services of that kind.

We have the Division of Power Management, which concerns itself with the negotiations and administration of the contracts and with studies, primarily studies concerning rates, repayment schedules and also other statistical studies of various kinds.

We have the Division of Engineering which is responsible for the planning that has been done, and was responsible for construction when there was construction to be done. They also spend a substantial amount of time in the preparation of budget presentations and act more or less as an engineering consultant to the other divisions in the Administration.

The fourth division is the Division of Operations.

They are responsible for working with the Corps of Engineers to see that the power plants are operated so as to comply with the obligations under our contracts with the customers. They spend a great deal of time in very much needed and very important water studies where they trace the water history of these plants, trying to determine the ways in which these plants can best be operated from the standpoint of the Government to produce the most power and produce the most revenue.

Now, all of these divisions have a big job when we are negotiating a contract with a power company.

In the negotiation of the Vepco contract it was necessary that all sorts of studies be made concerning the way in which the plant should be operated and the way in which the company could use the power, in order to be sure that we were making an arrangement which was in the best interest of the Government. Obviously, the companies, without any reflection on them, try to get the best deal they can, since they are businessmen, and it is necessary that the Government be in a position to protect the interests of the Government in these negotiations.

Mr. JENSEN. You have 80 people employed at the present time in all those functions which you have just explained?

Mr. LEAVY. Well, the 80 people actually include the people who are engaged in this planning work as well. That is really an additional function.

Mr. JENSEN. I understand that.

Mr. LEAVY. And, as I say, they are people who are employed on a temporary basis.

SALARIES

Mr. JENSEN. What are their total salaries at this time?
Mr. BURT. Approximately $265,000.
Mr. LEAVY. That is under O. and M.
Mr. BURT. O. and M. only.
Mr. LEAVY. That would not be the total for the 80.
Mr. BURT. No; that is for the operation and maintenance fund in which there are 52 employees at the present time.
Mr. JENSEN. You said that there were 80 people employed in administration, operation, and maintenance, and these other functions that you have just enumerated.
Mr. LEAVY. There are 51, is that the figure?
Mr. BURT. Fifty-two.
Mr. LEAVY. There are 52. Now, the additional 28 are not engaged in those functions, but are engaged in planning.
Mr. JENSEN. In planning?
Mr. LEAVY. Yes, sir; in planning. You see, the present appropriation for 1953 includes $115,000 for planning money, and those 28 people are paid out of that fund rather than out of the O. and M. fund.

PLANNING PERSONNEL

Mr. JENSEN. Do you think it is necessary to have 28 people in the Planning Division under present circumstances?
Mr. LEAVY. Well, if the planning is to be done, if it is determined that the planning should be done, if it is desirable, that number of people is needed to carry on the work.
Mr. JENSEN. Give me a breakdown of those 28 people as to their particular duties.
Mr. LEAVY. Could we furnish that to you, sir?
Mr. JENSEN. Yes.
Mr. LEAVY. I think it would save time.
(The matter referred to follows:)

PERSONNEL EMPLOYED AS OF MAR. 4, 1953, ON ADVANCE PLANNING FOR INTEGRATION OF FEDERAL HYDROELECTRIC PLANTS

Field, surveys:	
Engineering aids: Temporary annual, GS–2 to GS–7, instrument men, rodmen, chainmen	12
Laborers: Temporary hourly, axmen	9
Field clerks: Temporary annual, GS–2, timekeeping, reports, records	2
Office, engineering:	
Draftsmen: Temporary annual, GS–2, mapping, design standards	3
Clerk-typists: Temporary annual, GS–2, clerical, typing	2
Total personnel	28

Mr. JENSEN. You can understand why I am asking these questions, I am sure, Mr. Leavy.
Mr. LEAVY. Yes, sir.
Mr. JENSEN. Because of the cutback in construction, not only for Southeastern, but it is going to run pretty much, as I understand it, through other agencies of the Government. Not only in the Interior Department, but in every department, we are trying, as best we can, to save where we can without hurting the economy of the country or the war effort. Of course, we have such a terrific military load at

the present time that we simply have to find places where we can save here and there in order to carry on the military program that we have under way, and the end is not yet in sight.

That is what bothers us, and I am sure that is what bothers you as a good American citizen, Mr. Leavy.

Mr. LEAVY. Surely.

Mr. JENSEN. We have the all important job of trying, as best we can, to balance this budget.

POWER SALES CONTRACTS

Mr. LEAVY. I might mention, in that connection, that the amount which we are now requesting for O. and M. for the headquarters office happens to be exactly 2½ percent of the revenues that we expect to receive. We expect to turn $13 million into the Treasury in the next fiscal year, and we are concerned that the Government's investment in the plants is used wisely.

I have a list of the contracts which have been executed, if you would like to have that in the record or have it for your information.

Mr. JENSEN. Yes, without objection, I would like to have that included in the record.

(The matter referred to follows:)

Power sales contracts executed by the Southeastern Power Administration

Project	Customer's name	State
Dale Hollow, Center Hill, Wolf Creek.	Tennessee Valley Authority [1]	Tennessee, North Carolina, Georgia, Mississippi, Kentucky.
Allatoona	Georgia Power Co.[1]	Georgia.
	Georgia Electric Membership Corp.[2]	Do.
John H. Kerr	Virginia Electric & Power Co.[3]	Virginia.
	B-A-R-C Electric Cooperative	Do.
	Central Virginia Electric Cooperative	Do.
	Community Electric Cooperative	Do.
	Craig-Botetourt Electric Cooperative	Do.
	Mecklenburg Electric Cooperative	Do.
	Northern Neck Electric Cooperative	Do.
	Northern Piedmont Electric Cooperative	Do.
	Prince George Electric Cooperative	Do.
	Shenandoah Valley Electric Cooperative	Do.
	Southside Electric Cooperative	Do.
	Virginia Electric Cooperative	Do.
Clark Hill	Greenwood County Electric Power Commission	South Carolina.
	South Carolina Public Service Authority	Do.
	Canoochee Electric Membership Corp.[4]	Georgia.
	Central Georgia Electric Membership Corp.[4]	Do.
	Coastal Electric Membership Corp.[4]	Do.
	Coweta-Fayette Electric Membership Corp.[4]	Do.
	Douglas County Electric Membership Corp.[4]	Do.
	Excelsior Electric Membership Corp.[4]	Do.
	Hart County Electric Membership Corp.[4]	Do.
	Jackson Electric Membership Corp.[4]	Do.
	Jefferson County Electric Membership Corp.[4]	Do.
	The Little Ocmulgee Electric Membership Corp.[4]	Do.
	Middle Georgia Electric Membership Corp.[4]	Do.
	Mitchell County Electric Membership Corp.[4]	Do.
	Ocmulgee Electric Membership Corp.[4]	Do.
	Okefenoke Rural Electric Membership Corp.[4]	Do.
	Pataula Electric Membership Corp.[4]	Do.
	Planters Electric Membership Corp.[4]	Do.
	Sawnee Electric Membership Corp.[4]	Do.
	Sumter Electric Membership Corp.[4]	Do.
	Three Notch Electric Membership Corp.[4]	Do.
	Troup County Electric Membership Corp.[4]	Do.
	Walton Electric Membership Corp.[4]	Do.
	Washington County Electric Membership Corp.[4]	Do.

See footnotes at end of table, p. 353.

Power sales contracts executed by the Southeastern Power Administration—Continued

Project	Customer's name	State
Jim Woodruff	Alabama Electric Cooperative	Alabama.
	Suwanee Valley Electric Cooperative [5]	Florida.
	Talquin Electric Cooperative [5]	Do.
	Tri-County Electric Cooperative [5]	Do.
	Okefenoke Rural Electric [6]	Georgia.
	Three Notch Electric Membership Corp.[6]	Do.
Buford	Georgia Electric Membership Corp.[2]	Do.

[1] Executed by Department of the Interior prior to SEPA's establishment.
[2] For transmission service only.
[3] For wheeling, firming, and sale of power.
[4] Power delivery depends on agreement by Georgia Power Co. to wheel.
[5] Power delivery depends on agreement by Florida Power Corp. to wheel after project has been interconnected with another Federal reservoir project.
[6] Power delivery depends on agreement by Georgia Power & Light Co. to wheel after project has been interconnected with another Federal reservoir project.

Mr. JENSEN. Now do you have any other statement of facts or figures which you think should go into the record at this time, Mr. Leavy?

Mr. LEAVY. I do not believe I have anything.

I would like to mention, very briefly, one thing.

EXTENT OF POWER OPERATIONS BY FEDERAL GOVERNMENT IN THE SOUTHEAST

There have been some contentions, made principally by the Georgia Power Co., that the Government wishes to build a power empire in the Southeast. Their contention is based purely on the supposition that the Government intends to keep building plants, steam plants or hydro plants so long as there is necessity to serve the needs of preferred agencies.

I simply wanted to state, for the record, that this is an erroneous impression.

The Government's operation in the Southeast is not one that could be operated on such a basis that it would prejudice the operations of the private companies. The proof, I think, of our intentions in that regard is what we have done.

In the Vepco contract it is not contemplated that the Government will continue indefinitely to construct plants if they are needed to supply the needs of the preferred agencies. The Vepco contract very specifically provides that the company will wheel 60,000 kilowatts to preferred agencies and that when the loads of those agencies contracting with the Government exceed that amount that the company will sell the balance to them.

I just want to make that clear that in the way we have been operating we do not contemplate that the Government will be in a position to or will try to serve all of the needs of the preferred customers. We simply will market the power that is available to us from the projects that the Corps of Engineers is authorized to build.

OBJECTIVES IN THE FEDERAL POWER PROGRAM

Mr. JENSEN. I think you are aware of the position this committee has taken, which is that we want to see that private industry, munici-

palities, REA's, and the Federal Government play their proper part in the building of power-producing facilities and the transmission of that power in such a way that they will furnish, and make available, adequate power to all the people in this country at a rate commensurate with good business principles.

Mr. LEAVY. Well, that is our desire too, sir, and, as I have said before, we feel that the VEPCO contract does accomplish that purpose in that particular area.

Mr. JENSEN. We have taken no sides. We know that we must have every kind of money, in almost every area of America, invested in power-producing and transmitting facilities in order to furnish adequate power for all the areas in this country.

We have discovered that, where the Federal Government has taken over most of the power-producing and transmitting facilities, we have power shortages in those areas; namely, in the Tennessee Valley area, the Bonneville Power area.

Congress simply will not furnish enough money to build the necessary power-producing facilities and transmitting facilities which would be adequate for the people in any area, nor can private industry do it in many instances.

So, as I said before, it takes all kinds of money to furnish adequate power facilities for the people.

We discovered that quite some years ago, and we have been operating on that basis. We have insisted, as you know, that private industry exert their full effort and full capacity to build power-producing and transmitting facilities.

During the past 10 years they have been doing just that, in conjunction with the REA, the Federal Government, and the municipal light plants.

So, I think we are coming along pretty well. In fact, I feel a lot better about this whole power situation than I did 10 years ago, and I think everybody else does.

NUMBER OF EMPLOYEES

Mr. FENTON. How many employees does the Southeastern Power Administration have now?

Mr. LEAVY. It is 80, sir. Of those, 52 are paid from the operation and maintenance fund. The balance of 28 are engaged in planning work under an appropriation which was made for 1953. Those people who are engaged in that work are employed on temporary appointments.

NUMBER OF HYDRO POWER PLANTS

Mr. FENTON. How many hydro power plants do you have in your network now?

Mr. LEAVY. There are three power plants in operation in the Cumberland Basin in Kentucky and Tennessee. The Kerr project on the Roanoke River in Virginia is now in partial operation.

The Clark Hill project on the Savannah River between South Carolina and Georgia is now in partial operation.

The Philpott project in Virginia is sechduled to commence operation this next May.

The Jim Woodruff project in Florida is scheduled to commence operation in July 1954, and the Allatoona project, in Georgia, has been in operation for 3 years.

There are actually six projects presently in operation with one more coming in 2 months.

Mr. FENTON. When those are all completed you will have about 9 or 10, is that right?

Mr. LEAVY. Well, there are 6 in operation and the Philpott, Jim Woodruff and Buford projects are under construction presently, so there will be 9 projects when the present construction is completed.

There are a good many additional projects which have been authorized, or which are part of approved plans, but which are not now under construction.

Mr. FENTON. There is no new construction now, but in your plans how far north are you supposed to go with your proposed construction?

Mr. LEAVY. Are you referring to the plans for additional plants?

Mr. FENTON. Yes.

Mr. LEAVY. There are additional plants which are authorized, but which are not under construction in Virginia, West Virginia, South Carolina, Georgia, and Alabama.

Mr. FENTON. West Virginia is the farthest north, then?

Mr. LEAVY. That is correct, sir.

Mr. FENTON. How many customers do you supply?

Mr. LEAVY. We now have 15 customers. However, those customers do not account for all of the power which will be available when the plants are completed. The Clark Hill project and the Kerr project are both only partially under those 15 contracts.

POWER REVENUES

Mr. FENTON. What is the maximum amount of money paid by any of these customers annually?

Mr. LEAVY. The maximum would be the amount that is paid by TVA, since they take the entire output of the three plants in the Cumberland Basin. I believe that they pay on an annual basis, and I believe the payment for last year was something on the order of $4 million; is that correct, Mr. Burt?

Mr. BURT. Yes, sir.

Mr. FENTON. That is your major customer?

Mr. LEAVY. Well, it is the largest customer in terms of revenue, that is right.

TOTAL REVENUE FROM CUSTOMERS

Mr. FENTON. How much revenue do you receive from these 15 customers?

Mr. LEAVY. It is a little difficult for me to say just what it would amount to from these 15 customers, since some of them are just taking a portion of what they will ultimately take. Our estimate of revenues are that this fiscal year from all customers we will take in $7,319,000 and it is estimated that during the fiscal year 1954 we will take in from all customers that we then have $13 million.

Mr. FENTON. Will you put a list of the customers that you supply in the record and the amount of revenue each year from each?

Mr. LEAVY. I have a list of the contracts which we have. It does not, however, show the revenues.

Mr. FENTON. I wanted to show who these customers are and how much revenue you get from them.

(The matter referred to is as follows:)

Revenues, fiscal year 1952

Allatoona project: Georgia Power Co	$1, 137, 875. 50
Cumberland projects: Tennessee Valley Authority	4, 147, 600. 00
Total	5, 285, 475. 50

Estimated revenues, fiscal year 1953

John H. Kerr project:	
Virginia Electric & Power Co	$651, 000
Co-ops served from Virginia Electric & Power Co. system	740, 000
Co-ops served from Carolina Power & Light Co. system [1]	61, 000
Project total	1, 452, 000
Philpott project: Appalachian Electric Power Co	29, 000
Clark Hill project:	
South Carolina Public Service Authority	816, 000
Greenwood County Electric Power Commission	22, 000
Project total (does not include possible sales of secondary and dump energy to others)	838, 000
Allatoona project: Georgia Power Co	1, 100, 000
Cumberland projects: Tennessee Valley Authority	3, 900, 000
Grand total	7, 319, 000

Estimated revenues, fiscal year 1954

John H. Kerr project:	
Virginia Electric & Power Co	$1, 150, 000
Carolina Power & Light Co.[1]	488, 000
Co-ops served from Virginia Electric & Power Co. system [1]	1, 829, 000
Co-ops served from Carolina Power & Light system [1]	922, 000
Project total	4, 389, 000
Philpott project:	
Appalachian Electric Power Co.[1]	81, 000
Preference agencies [1]	99, 000
Project total	180, 000
Clark Hill project:	
South Carolina Public Service Authority	1, 978, 000
Greenwood County Electric Power Commission	264, 000
Cooperatives [1]	1, 377, 000
Wheeling agency [1]	300, 000
Project total	3, 919, 000
Allatoona project: Georgia Power Co	1, 100, 000
Cumberland projects: Tennessee Valley Authority	3, 575, 000
Grand total	13, 163, 000

[1] Depends on contracts yet to be negotiated.

Bluestone Project

Mr. Fenton. All of these dams were built by the Army engineers; were they not?

Mr. Leavy. That is correct, sir.

Mr. Fenton. What is your proposed plan for West Virginia?

Mr. Leavy. The Corps of Engineers has a flood-control project which has been built in West Virginia called Bluestone. There are, however, no power facilities in that project. It is designed so that power could be installed in it. So far as we know the corps has no immediate plans to install power facilities at that dam.

Mr. Fenton. Just where in West Virginia is this located?

Mr. Leavy. Mr. Wigglesworth?

Mr. Wigglesworth. That is located in the southeastern part of West Virginia; it is on the New River.

Mr. Fenton. What large town is in that neighborhood?

Mr. Wigglesworth. It is closest to Hinton, I believe.

Applications For Power

Mr. Fenton. Do you have any of your personnel going around looking for business?

Mr. Leavy. We do not have people who are going out trying to solicit business. We do, of course, meet with people who express their desire to purchase power from us.

When the Agency was started a letter was sent to each of the preferred agencies, informing them of the establishment of the Agency and of their preference under the law and giving them an opportunity to make application for power if they wished.

Some 123 or 124 agencies have made application for power. As power becomes available that can be delivered to those agencies we do enter into negotiations with them.

Mr. Fenton. Do you get many applications from other than preferred customers?

Mr. Leavy. The private companies have all made proposals whereby they would purchase power from the projects which are in or near their service areas. They have not, by and large, made proposals which would enable any of the power to be sold by the Government to preferred agencies.

Mr. Fenton. Are any others, other than the power companies seeking your services?

Mr. Leavy. There have been a few requests from industrial concerns.

However, we have not been in a position to supply power for that purpose, for several reasons, one being that the needs of the agencies which are given preference under section 5, generally speaking, exceed the amount of power that is available from the projects, and, further, the available power is not available at the very high load factor which is needed by most industrial users.

Our advice to people who have come to us on that basis has been to go to their local supplier, whether public or private, and see if they could work out arrangements with them.

We do not supply any industrial users.

Mr. FENTON. Have you, under your present setup, been able to supply the preferred customers?

Mr. LEAVY. We have not, in some areas, been able to supply the preferred customers.

NEED FOR WHEELING CONTRACTS SIMILAR TO THE VEPCO CONTRACT

As I mentioned, I believe, before you came in, we have a contract with the Virginia Electric & Power Co. which does provide for wheeling and gives us a means of delivering power to preferred customers in that company's service area.

We do not have similar agreements with other companies in that area and have to date not been able to get them. We need wheeling agreements with the Georgia Power Co. and the Carolina Power & Light Co. if we are going to be able to deliver power to the preferred customers in North Carolina and Georgia.

Mr. FENTON. What is the reason they have not come in with a proposal for the type of contract which was given to the Virginia people?

Mr. LEAVY. The Georgia Power Co. has simply refused to consider entering into a wheeling contract. They have made a proposal that all of the power which is available for Georgia from these plants be sold at the bus bar directly to the company, and then they would resell it to preferred agencies after adding the transmission fee.

The Carolina Power & Light Co. has made a somewhat similar proposal, and we are now in the process of negotiations with that company, and are hopeful that we can work out an agreement with them similar to the Vepco agreement. We have proposed such a contract to them.

Mr. FENTON. I suppose the reason is that they think that they have plenty of transmission facilities to take care of their localities.

Mr. LEAVY. It is our desire to make use of their transmission facilities if they will enter into a wheeling agreement. In Virginia the Government uses the transmission facilities of the company and pays the company for that service.

Mr. FENTON. I am familiar with that.

Mr. LEAVY. The other companies that I mentioned have not been willing to do that. I assume that they feel that the proposals that they make have some economic advantages to them, and it is our feeling that their proposals may mean that the benefits are not equitably distributed among the Government, the preferred customers, and the company. We feel that under the VEPCO agreement the benefits have been equitably distributed.

ATTITUDE ON REVISED BUDGET

Mr. FENTON. While I know that there is no new construction to be undertaken at the moment, have your plans in those areas anything to do with transmission lines in those areas?

Mr. LEAVY. The original budget proposal for Southeastern did include some transmission lines. As pointed out earlier, it included some lines which would be to tie the Government projects together so that they could be operated in the best manner and included some

facilities for direct service to customers in areas where the companies have refused to enter into wheeling agreements. The latter are facilities that would not be needed if the companies would be willing to wheel.

Mr. NORRELL. I have reviewed the original budget, and I think I am familiar with the budget as revised.

Referring to this revised budget, is it substantially satisfactory to the Southeastern Power Administration, especially regarding construction?

Mr. LEAVY. That is a rather difficult question to answer.

Mr. NORRELL. I want to say for the record that I do not want to put you on the spot, and, if you hesitate to answer, we will eliminate it from the record.

Mr. LEAVY. I have no hesitation about answering it. Southeastern proposed this original program, and it was recommended by Southeastern as a sound program, based on certain assumptions that we made as to what was in the best interest of the Government. The program, I believe, is desired generally by the preferred agencies in the area. It is my understanding that the review which the Department has made of that program does not necessarily mean that the Department has decided that the program is a bad one.

Mr. NORRELL. I gathered that from your statement a while ago. It is more of an opportunity for your Administration and corps of officials to take a look at it.

Mr. LEAVY. Yes, sir.

Mr. NORRELL. That is what your planning money is for. The program may or may not ultimately come out according to your original recommendation. With that in mind I assume, therefore, that there are no deep objections to going along with the program.

Mr. LEAVY. No objections?

Mr. NORRELL. What I am trying to get at is this: In view of the temporary suspension, and not permanent cancellation, I assume that there is not a great deal of objection to going along with that program at the moment but the other people want a chance to restudy the situation?

Mr. LEAVY. That is correct. We have our own appraisal of it.

Mr. NORRELL. But you are not objecting to going along with the idea of giving the other people an opportunity to study it and look at it again?

Mr. LEAVY. No, sir.

REPAYMENT OF PROJECT COSTS

Mr. NORRELL. Have you studied the rate base of the Southeastern Power Administration to determine two things: (1) Whether the rate is in conformity with the project which was originally authorized for construction by the Congress; and (2) whether or not your returns will be sufficient to return to the Treasury all costs including construction and operation, with the interconnecting projects of the Southeastern Power Administration?

Mr. LEAVY. Our rate studies are designed to return the cost to the Government, the cost of the projects.

Mr. NORRELL. And you believe that they will?

Mr. LEAVY. That is our opinion; yes, sir.

Mr. NORRELL. Do they vary much from the plans that were set up in the justification for the construction of the dams by the Public Works Committee; or do you know?

Mr. LEAVY. I could not answer that question categorically. I do know that our studies show that the amount of revenue which we believe necessary to pay off the cost may be somewhat less than the benefits which were included in the original studies.

Mr. NORRELL. You primarily sell at wholesale; do you not?

Mr. LEAVY. We sell only at wholesale; yes, sir.

DIFFERENCES IN FEDERAL AND PRIVATE UTILITY POWER RATES

Mr. NORRELL. I know that arriving at power rates is a technical job, and I would not attempt to go into it here because of the technicalities which are involved, but are there substantial differences in the wholesale rates on power between the Southeastern Power Administration rates and those of the private power companies in that area?

Mr. LEAVY. The private companies generally in the area have rates which are, on the whole, I would say considerably higher than the Government's rates. However, most of the companies have special rates which are available to the REA cooperatives which are lower than their general rate level.

Those rates are generally somewhat higher than the rates at which we sell power. The preferred agencies have realized some savings from Government power.

Mr. NORRELL. Now, in my State of Arkansas, it has always, at least, for several years past, been indicated that the private utilities were selling power to the REA's a little cheaper than the Southwestern Power Administration. I have inquired about that, and I think probably it is true.

The question of how you establish a rate is a technical thing, I am not too familiar with it, and if I were I would not want to bring it up here because it is not necessary for the purpose of the discussion. However, the utilities say that is true. I understand the reason why it is true is because the utilities actually are willing and anxious to sell power probably a little cheaper in order to subsidize or promote rural electrification, which I think is all right.

I wonder if your wholesale rate and the utility wholesale rate in your area to the REA's are about the same?

Mr. LEAVY. Ours is somewhat lower. In Virginia, for example, the company's rate to the co-ops is 7½ mills per kilowatt-hour. Our rate, depending on the load factor of the customers, will run from 6½ to 7 mills a kilowatt-hour.

Similarly in Georgia I believe the company's average rate is about 6.7 mills per kilowatt-hour, and our rate would be somewhat on the order, I believe, of 6 to 6¼ mills, somewhat below.

THURSDAY, MARCH 5, 1953.

SOUTHWESTERN POWER ADMINISTRATION

WITNESSES

DOUGLAS G. WRIGHT, ADMINISTRATOR
EARL D. CONDER, BUDGET EXAMINER
FRENCH ANDERSON, ASSISTANT CHIEF OF OPERATIONS
SIDNEY LARSON, DIRECTOR OF BUDGET AND FINANCE

CONSTRUCTION

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$2,775,000	$3,020,000	$1,500,000
Prior year balance available	2,854,745	3,532,967	
Reimbursements from non-Federal sources	5,305	7,500	4,500
Reimbursements from other accounts	3,329		
Total available for obligation	5,638,379	6,560,467	1,504,500
Balance available in subsequent year	−3,532,967		
Obligations incurred	2,105,412	6,560,467	1,504,500

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
1. Construction in progress	$1,812,555	$3,819,838	$385,000
2. New construction and additions	284,223	2,733,129	1,115,000
Total obligations from appropriated funds	2,096,778	6,552,967	1,500,000
Reimbursements from non-Federal sources: 2. New construction and additions	5,305	7,500	4,500
Total direct obligations	2,102,083	6,560,467	1,504,500
Obligations Payable Out of Reimbursements From Other Accounts			
1. Construction in progress	3,329		
Obligations incurred	2,105,412	6,560,467	1,504,500

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Summary of Personal Services			
Total number of permanent positions	116	99	21
Average number of all employees	104	96	20
Average salaries and grades:			
General schedule grades:			
Average salary	$4,917	$5,014	$5,068
Average grade	GS–7.2	GS–7.2	GS–7.1
Personal service obligations:			
Permanent positions	$507,489	$483,448	$102,530
Regular pay in excess of 52-week base	2,178	1,918	370
Payment above basic rates	1,632	2,834	100
Total personal service obligations	511,299	488,200	103,000

Obligations by objects—Continued

Object classification	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
01 Personal services	$508,792	$488,200	$103,000
02 Travel	45,173	57,720	27,000
03 Transportation of things	910	6,010	2,000
04 Communication services	11,054	6,000	
05 Rents and utilities	65		
06 Printing and reproduction	5,520	8,000	3,000
07 Other contractual services	287	8,600	
08 Supplies and materials	178,253	344,070	215,000
09 Equipment	397,969	1,725,879	350,000
10 Lands and structures	948,258	3,907,088	800,000
13 Refunds, awards, and indemnities	79	600	
15 Taxes and assessments	418	800	
Total obligations from appropriated funds	2,096,778	6,552,967	1,500,000
Reimbursements from non-Federal sources: 09 Equipment	5,305	7,500	4,500
Total direct obligations	2,102,083	6,560,467	1,504,500
Obligations Payable Out of Reimbursements From Other Accounts			
01 Personal services	2,507		
09 Equipment	822		
Total obligations payable out of reimbursements from other accounts	3,329		
Obligations incurred	2,105,412	6,560,467	1,504,500

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$3,820,669	$2,793,707	$5,108,681
Obligations incurred during the year	2,105,412	6,560,467	1,504,500
	5,926,081	9,354,174	6,613,181
Deduct:			
Reimbursable obligations	8,634	7,500	4,500
Unliquidated obligations, end of year	2,793,707	5,108,681	2,008,681
Obligations transferred to "Construction (liquidation of contract authorization), Southwestern Power Administration"	600,000	1,130,000	
Total expenditures	2,523,740	3,107,993	4,600,000
Expenditures are distributed as follows:			
Out of current authorizations	2,523,740	2,500,000	600,000
Out of prior authorizations		607,993	4,000,000

Operation and Maintenance

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$1,255,712	$1,450,000	$1,900,000
Unobligated balance, estimated savings	−223,897		
Obligations incurred	1,031,815	1,450,000	1,900,000

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
1. System operation and maintenance	$570,542	$765,000	$1,105,000
2. Power marketing	95,014	110,000	95,000
3. General administration	366,259	575,000	700,000
Obligations incurred	1,031,815	1,450,000	1,900,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	219	276	390
Full-time equivalent of all other positions	2	15	5
Average number of all employees	188	273	359
Average salaries and grades:			
General schedule grades:			
Average salary	$4,917	$5,014	$5,068
Average grade	GS-7.2	GS-7.2	GS-7.1
Ungraded positions: Average salary	$3,358	$3,480	$3,520
01 Personal services:			
Permanent positions	$814,623	$1,115,257	$1,569,555
Part-time and temporary positions	3,670	33,000	10,000
Regular pay in excess of 52-week base	3,620	4,577	6,865
Payment above basic rates	13,632	15,166	19,580
Total personal services	835,545	1,168,000	1,606,000
02 Travel	75,889	89,080	154,000
03 Transportation of things	7,993	13,990	18,000
04 Communication services	16,140	19,000	21,000
05 Rents and utility services	14,130	30,000	28,000
06 Printing and reproduction	3,086	13,000	8,000
07 Other contractual services	64,975	27,900	20,000
08 Supplies and materials	12,131	85,930	42,000
13 Refunds, awards, and indemnities	93	900	1,000
15 Taxes and assessments	1,833	2,200	2,000
Obligations incurred	1,031,815	1,450,000	1,900,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$61,800	$71,542	$149,542
Obligations incurred during the year	1,031,815	1,450,000	1,900,000
	1,093,615	1,521,542	2,049,542
Deduct:			
Adjustment in obligations of prior years	13,320		
Unliquidated obligations, end of year	71,542	149,542	199,542
Total expenditures	1,008,753	1,372,000	1,850,000
Expenditures are distributed as follows:			
Out of current authorizations	960,273	1,300,458	1,700,458
Out of prior authorizations	48,480	71,542	149,542

Continuing Fund

Amounts available for appropriation

	1952 actual	1953 estimate	1954 estimate
Unappropriated balance brought forward	$2,267,095	$2,557,852	$1,540,384
Receipts	2,557,852	4,743,000	9,680,000
Total available for appropriation	4,824,947	7,300,852	11,220,384
Covered into miscellaneous receipts	−2,267,095	−4,743,000	−3,480,000
Appropriation or estimate		−1,017,468	−5,650,000
Balance carried forward	2,557,852	1,540,384	2,090,384

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate		$1,017,468	$5,650,000
Prior year balance available	$300,000	282,532	300,000
Total available for obligation	300,000	1,300,000	5,950,000
Balance available in subsequent year	−282,532	−300,000	−300,000
Obligations incurred	17,468	1,000,000	5,650,000

Obligations by activities

	1952 actual	1953 estimate	1954 estimate
1. Purchase of power and service charges	$17,468	$500,000	$3,850,000
2. Rental of transmission facilities		500,000	1,800,000
Obligations incurred	17,468	1,000,000	5,650,000

Obligations by objects

Other contractual services:	
1952	$17,468
1953	1,000,000
1954	5,650,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year		$7,468	$207,468
Obligations incurred during the year	$17,468	1,000,000	5,650,000
	17,468	1,007,468	5,857,468
Deduct unliquidated obligations, end of year	7,468	207,468	457,468
Total expenditures	10,000	800,000	5,400,000
Expenditures are distributed as follows:			
Out of current authorizations	10,000	792,532	5,192,532
Out of prior authorizations		7,468	207,468

Mr. JENSEN. The committee will come to order. The committee has before it this morning Mr. Douglas Wright, Administrator of the Southwestern Power Administration. Mr. Wright, I presume you have a statement to make in connection with your budget request.

GENERAL STATEMENT

Mr. WRIGHT. Yes, sir, I do have. I have filed with the committee a brief statement, and I think it essential that I elaborate upon this statement orally in considerable detail because of the very rapidly changing complexion of the power picture in the Southwest.

Mr. JENSEN. All right, proceed.

Mr. WRIGHT. In making a statement before this committee it has always been our policy to try to give this committee as complete a picture of the total power-supply situation in the Southwest as possible, and a brief statement of the results of our operation up to this time, plus a justification for the funds we are asking the committee to consider for the coming year's estimate.

In doing this we, perhaps, touch on subjects that normally would not be appropriate for budget presentation, but it should be remembered that this is the only opportunity that the Southwestern Power Administration has to appear before any representative body of the House of Representatives during the year, and if we are to express our views on problems to the Congress, they must be expressed during this budget hearing.

I, therefore, beg the committee's consideration in making such a statement.

BASIC POWER PROBLEMS

First, I would like to say that there are three basic power problems that I believe remain to be solved in the Southwest which the committee should have knowledge of.

The first is the problem of the adequacy of power supply in the area;

The second is the relative cost of the various kinds of power supplied in the areas; and

The third is the effect of the Government's power program upon the other power suppliers of the area.

Obviously, it would appear to be in the interest of all if, first, every customer in the area, whether served by the Government or other sources, were assured of an adequate power supply.

Second, it should be reasonable to assume that every customer in the area should get the most reasonably priced power that is available consistent with sound business principles.

Third, that this program should be carried out, if possible, with consideration of the rights of all and the encouragement of all to do the best possible power-supply job.

In meeting these requirements in the Southwest we had certain basic factors to take into consideration.

First, insofar as the Southwest is concerned, I want to explode once and for all the myth that hydroelectric power is necessarily cheap power.

The kind of hydroelectric power which is produced in the Southwest is peaking power which, by its very nature, is the most expensive type of power there is.

It is possibly, and quite probably true, that the cheapest way to produce this kind of power in the Southwest is through hydroelectric projects.

That cannot be stated as a fact, however, without demonstration.

As an example of what I mean there have now been constructed in the Southwest, or there are in the process of completion, and coming in within this current year, or the early part of next year, some eight hydroelectric projects. These, with others, that are likely to be constructed in the near future indicate the problem of cost that faces both the Congress and the marketing agency.

For example the 12 most feasible hydroelectric plants in the Southwest are parts of the Denison, Norfolk, Narrows, Whitney, Bull Shoals, Fort Gibson, Tenkiller Ferry, and Blakely Mountain Dams, which are completed or under construction and Table Rock, Keystone, Short Mountain and Dardanelle projects which are not yet under construction.

Now, we find that these 12 projects were authorized by Congress on the basis of the estimated cost of $377,938,230.

However, as of April 1952 they have cost $703,367,800, or an increase of some $325 million in estimated cost since the date of the authorization, or, approximately 86 percent increase.

This represents, in our judgment, a real problem to both Congress and the marketing agency. The solution of it is not easy.

RATE PROBLEM

I believe this problem, which is a rate problem, exists everywhere in the United States where you have these hydro projects. It seems to us, and we present for the consideration of this committee, the idea that when a dam is initially under consideration by the Congress, if the marketing agency can be told what the dam will produce by way of power, it can tell the Congress rather accurately what the revenues from the dam can be expected to be, and how much of the capital investment in the project those revenues would repay. It also indicates to the Congress how much the going rates in an area might have to be raised if a particular higher cost project was included in the power program.

We believe that serious consideration should be given by members of this committee to this problem.

CONTRACTUAL RELATIONSHIPS

So, we say this, the Southwestern Power Administration is now faced with the certainty of at least minor rate increases, and the probability of a rather major rate increase because of the tremendous increase in the cost of construction of these hydroelectric projects, and also in the case of some of the other contractual relationships that we have undertaken.

In order to disturb the power picture as little as possible we have followed the system of attempting to work out contractual relationships with the existing power suppliers in the area so as to utilize peaking power at these hydroelectric projects integrated with the fuel-burning generating capacity of others and also utilizing the transmission facilities for the mutual use of all the parties concerned.

To make a long story short, this has been successful. The results of this success are represented in three contractual arrangements, one with the Texas Power & Light Co., covering about one-third of the State of Texas; another with the two major utility companies in the State of Oklahoma, covering the entire State of Oklahoma, and another with the Southwestern Gas & Electric Co., covering a corner of Arkansas and a corner of Louisiana.

CUSTOMERS SERVED UNDER CONTRACTUAL ARRANGEMENTS

I am going to present to the committee and ask that it be made a part of the record, an exhibit showing the customers that are served under these contractual arrangements.

(The record referred to follows:)

Status of contracts and power applications in area of Southwestern Power Administration

CONTRACTS IN TEXAS

	Kilowatts	*Contract demand kilowatts*
To power companies: Texas Power & Light Co		35,000
Service to preferred customers from Texas Power & Light system:		
Brazos Electric Power Cooperative, Inc	10,000	
Deep East Texas Electric Cooperative	3,050	
Fannin County Electric Cooperative	950	
Farmers Electric Cooperative	1,950	
Grayson-Collin Electric Cooperative	1,650	
Hunt-Collin Electric Cooperative	400	
Kaufman County Electric Cooperative	1,300	
Sam Houston Electric Cooperative	275	
Total	19,575	
Application for service from Texas Power & Light system:		
Livingston, Tex	1,500	
Total	1,500	
Total from Texas Power & Light system	21,075	
Contracts under negotiation: Brazos Electric Power Cooperative, Inc		30,000
Total contracts and commitments in Texas		65,000

CONTRACTS OUTSIDE OF TEXAS

Power committed under Oklahoma utility companies contract		30,938
Service to preferred customers under Oklahoma utility companies contract:		
Canadian Valley Electric Cooperative	2,800	
Choctaw Electric Cooperative	1,400	
Kiamichi Electric Cooperative	1,300	
People's Electric Cooperative	2,500	
Southeastern Electric Cooperative	1,200	
East Central Oklahoma Electric Cooperative	600	
Clarksville, Ark	1,125	
Crescent, Okla	400	
Eldorado, Okla	460	
Fort Sill, Okla. (U. S. Army)	4,000	
Goltry, Okla	75	
Granite, Okla	200	
Lexington, Okla	140	
Purcell, Okla	775	
Ryan, Okla	225	
Skiatook, Okla	450	
Spiro, Okla	350	
Wetumka, Okla	400	
Yale, Okla	350	
Total		18,750
Contracts with private utility companies:		
Arkansas Power & Light Co	[1] 60,000	
Southwestern Gas & Electric Co	17,000	
Total		77,000

[1] Up to 160,000 kilowatts can be sold under this contract. (Expires Dec. 31, 1953, or when Arkansas Power & Light and Reynolds contract begins.)

Status of contracts and power applications in area of Southwestern Power Administration—Continued

CONTRACTS OUTSIDE OF TEXAS—continued

Service to preferred customers under Southwestern Gas & Electric Co. contract:		
Wood County Electric Cooperative	2,700	
Upshur Rural Electric Cooperative	1,150	
Panola-Harrison Electric Cooperative	150	
Total		4,000
Contracts with G. & T. Cooperative:		
Central Electric Power Cooperative	70,000	
KAMO Electric Cooperative	55,000	
M. and A. Electric Power Cooperative	450	
Do	5,000	
Northwest Electric Power Cooperative	40,000	
Sho-Me Power Corp	7,000	
Do	600	
Western Farmers Electric Cooperative	30,000	
Total		208,050
Contracts with other preferred customers:		
North Arkansas Electric Cooperative	2,150	
Anadarko, Okla	600	
Carmen, Okla	200	
Hermann, Mo	550	
Lamar, Mo	1,500	
Lockwood, Mo	300	
Poplar Bluff, Mo	1,500	
Sikeston, Mo	3,000	
Springfield, Mo	10,000	
Waynoka, Okla	600	
West Plains, Mo	2,500	
Hominy, Okla	300	
Altus Air Force Base	500	
Total		23,700
Contracts with essential industry:		
Arkansas Power & Light Co., and Reynolds Metals Co		150,000
Total contractual commitments other than Texas		489,688
Total contractual commitments		554,688
Less Arkansas Power & Light contract expiring Dec. 31, 1953		−60,000
Net contractual commitments		494,688

You will note from this list that in the State of Texas there are 8 cooperatives being served, 7 of which are individual REA cooperatives, and 1 is a large generating and transmission cooperative. These cooperatives take the entire power available from the Denison Dam, amounting to some 20,000 kilowatts.

This represents service to some 150,000 to 200,000 farm people. They are served entirely through the Texas Power & Light Co. contract.

The contract is entirely successful for the company, the Government, and these users. The Government returns through this contract represent the maximum returns it could possibly get, in our judgment, with the least cost of this distribution.

Referring to the map, deliveries of power in the State of Texas are being made at every red dot on that map [indicating] which covers the area from Brownwood to Center, a distance of some 500 miles,

and from Denison on the north as far south as Minerva, a distance of 400 miles. To have constructed transmission lines covering this area would have involved fantastic costs.

Under the Oklahoma contract we are serving all of the six REA cooperatives in the eastern half of Oklahoma which are not served by the Grand River Dam Authority.

We are serving 11 towns and 1 military installation in Oklahoma, and 1 town, Clarksville, in Arkansas. This contract, likewise, has been successful.

In the case of the Narrows Dam contract with the Southwestern Gas & Electric Co., we are serving three REA cooperatives.

We find that in the fiscal year 1952, this last year, 70 percent of all of the firm capacity available to the Southwestern Power Administration was delivered to preferred customers; 54 percent of this capacity was delivered to REA cooperatives; 59 percent of all the firm energy generated at all Federal projects was delivered to preferred customers; 50 percent of all the firm energy generated was delivered to REA cooperatives.

I believe you will find that these figures represent a percentage of several times greater than that obtaining in any other area in the United States.

I realize we have not yet contractual arrangements that permit us to serve in the major portions of Louisiana, Arkansas, Missouri, or Kansas, or the southern portion of Texas.

CONTRACT NEGOTIATIONS

Generally speaking, we have one remaining power-distribution problem to solve, which is negotiations with 12 private utility companies which will cover this area. These negotiations give us great promise of being effectuated. They have been under way a long time.

Very briefly, their history. Under the direction of the Secretary of the Interior, a year ago from last September, I was called into the Department of the Interior and instructed to enter into negotiations with these companies.

On January 18, 1952, there was submitted to the Department of the Interior for their comments and suggestions a draft of agreement which we considered adequate for the purpose.

Comments and suggestions were received on that contract on January 19 of this year, 1953.

Subsequent to the receipt of these comments and suggestions, we have reopened negotiations with those companies.

We believe that we will be able to solve those negotiations within the reasonably near future, and the Southwestern Power Administration will then be able to carry out the mandates of the Flood Control Act anywhere within its marketing area.

There have been, as you gentlemen know—and I would be the last one to gloss them over—a great deal of controversy, suspicion, and distrust of various opposing forces to this program. Gradually these things are being channeled into a common effort. We have no power problem in the State of Texas today. There is full integration not only with the cooperatives and companies, but with the generating and transmission cooperatives and companies. They have contracts

with five companies. There is very little of a power problem left in the State of Oklahoma, although slightly more than there is in Texas.

Gradually, however, both the generating and transmission cooperative people and the company people are seeing the advantages of working their problem out through integration, and I am confident the solution will be achieved.

EFFECT OF ARKANSAS SUPREME COURT DECISION ON RENTAL OF FACILITIES AND PURCHASE OF ENERGY

The remaining controversy is the G. and T. problem. It was solved in the State of Arkansas some 2 weeks ago by the Supreme Court, which ruled that this cooperative did not have the right to build its proposed system. You can see [indicating] that the lines are removed from this map and will not be constructed.

Service in Arkansas will be through a company contract undoubtedly, but in other areas—the central area of Missouri around Jefferson City, the southwestern corner of Missouri, the northeastern corner of Oklahoma, and the western half of Oklahoma—we have generating and transmission systems that are nearing completion.

The power cooperative in central Missouri called Sho-Me Power Corp. also has a system nearing completion. That corporation bought out all of the private utility facilities some 7 or 8 years ago.

Mr. JENSEN. That is a cooperative?

Mr. WRIGHT. It was a cooperative, but it has been declared a private power corporation in the State of Missouri, and it is under the jurisdiction of the utility commission of Missouri.

In my judgment this case has been tried before the Federal District Court of the District of Columbia on the issue as to whether the Government's contracts with the generating and transmission cooperatives are legal. If the contracts are found to be legal, then you will have the Government in the position of being under obligation to carry out the contracts.

The problem in that case will be the adjustment in rates to cover the increased costs which have been encountered in the construction of these projects.

A major adjustment of rates will probably be necessary but, likewise, that change in rate structure, in my judgment, will force the integration of that G and T system into the total power picture with the companies and the Government.

If the contracts are found to be illegal then the generating and transmission cooperatives, in my judgment, will themselves integrate with the existing utility companies.

In other words, the cheapest way to solve the power problem is to do what Texas has done over 10 or 12 years, that is, they have finally secured complete integration. That is what these people will have to do before they get the forces of economics into their picture.

You cannot persuade them to do much more now than you could 2 years ago.

There was a time when they would not meet on it, or would not meet with us, but gradually because none of us have been able to take too much advantage of the other in this power picture they have come to where they will meet.

That, gentlemen, is the overall power picture in the Southwest.

OUTSTANDING PROBLEM—RATES

It is solving itself in every way except the rate solution, and I do not know the answer to the total rate problem in the Southwest.

We have these limiting factors. Before a rate structure that is in existence, and has been for several years, is materially raised I think the picture should be presented to you so that you know about it.

Second, no matter what you want to do, there is a ceiling beyond which you cannot raise this rate, and that is the ceiling at which they can buy it somewhere else cheaper.

In other words, if we price power at $1 a kilowatt-hour in the Southwest we are not going to sell it; nobody will buy it. We can tell you pretty accurately what those limits are.

In firm power the limits probably are between 7 and 8 mills per kilowatt-hour.

In peaking power the limit is probably somewhere between 8 mills to 1 cent per kilowatt-hour.

We are now securing from the Narrows Dam project an average return from the Southwestern Gas & Electric Co. of 8 mills a kilowatt-hour for the average output of that plant.

REVENUES

We will keep the committee informed as we go along. We are going to present the committee, in the course of this hearing, with a complete statement of our revenues to date. I would like to insert it in the record right now, if I may. It is a very brief table.

(The matter referred to follows:)

Receipts from the sale of electric power and energy for the fiscal years 1945–52 and from July 1 to Nov. 30, 1952

Fiscal year	Gross receipts	To continuing fund	Net receipt applicable for repayment
1945	$508,000.88	$100,000.00	$408,000.88
1946	1,260,304.73		1,260,304.73
1947	1,442,641.48		1,442,641.48
1948	1,521,171.46		1,521,171.46
1949	1,660,683.62		1,660,683.62
1950	1,980,551.65	278,765.24	1,701,786.41
1951	2,267,095.29		2,267,095.29
1952	2,557,851.78		2,557,851.78
1953 (July to November)	975,602.65		975,602.65
Total	14,173,903.54	378,765.24	13,795,138.30

Mr. WRIGHT. It shows, Mr. Chairman, that since 1945 we have total revenues of $14,173,903.54, through November 1952.

EMERGENCY FUND HISTORY

Against that sum you will notice that there has been a continuing fund established and a total placement in that fund of $378,000. The amount actually expended from that continuing fund is something on the order of $120,000 or $130,000. Is that correct?

Mr. CONDER. Yes.

Mr. JENSEN. Exactly how much did you expend from that continuing fund?

Mr. WRIGHT. $78,000 for administrative expenses in one fiscal year, which was later appropriated for, but instead of reimbursing it the funds were returned to the Treasury.

Then we have spent for the purchase of power and the leasing of lands, something on the order of $50,000. I can give you that figure exactly for the record.

Mr. JENSEN. That is it approximately?

Mr. WRIGHT. Yes, sir.

Mr. JENSEN. So, you have actually expended out of that continuing fund around $128,000 to $130,000?

Mr. WRIGHT. That is correct.

Mr. JENSEN. So, you still have in the fund about $250,000?

Mr. WRIGHT. That is right.

Mr. JENSEN. All right; go ahead.

OPERATION AND MAINTENANCE

APPROPRIATIONS AND EXPENDITURES, 1944–1953

Mr. WRIGHT. Now, I would like to tell the committee, very briefly, what we have done with what you have given us in the past, and I would like to furnish for the record a statement of the appropriations made for the O. and M. operation of the Southwestern Power Administration in previous years, and the results of that appropriation.

(The material referred to follows:)

Operation and maintenance appropriations, expenditures, and unexpended balances, fiscal years 1944 through 1952, as of Jan. 31, 1953

Year	Appropriation	Expenditures	Unexpended balance of appropriation	Remarks
1944	$135,000	$65,077	$69,923	Returned to Treasury.
1945	140,000	89,164	91,682	Do.
1946	110,000	91,682	18,318	Do.
1947	100,000	95,322	4,678	Do.
1948	125,000	124,547	453	Do.
1949:				
Regular $260,000				
Deficiency 131,000				
	391,000	277,721	113,729	Returned to Treasury. Expenditures from continuing fund were not reimbursed in the amount of $78,765, but this portion of deficiency appropriation was returned to Treasury in June 1949. Balance of $34,964 returned to Treasury when appropriation lapsed, June 30, 1951.
1949 continuing fund		78,765		The continuing fund was used to meet expenses during February, March, April, and May, 1949, pending receipt of deficiency appropriation. Was not reimbursed from appropriation.
1950	525,000	267,087	257,913	1950 appropriation available until expended. Operation and maintenance savings of $257,913 carried over and utilized on construction program.
1951	760,000	638,565	121,435	Will be returned to Treasury on June 30, 1953. No unliquidated obligations.
1952	1,255,712	1,028,492	227,220	Will be returned to Treasury June 30, 1954, after liquidation or adjustment of $4,887 outstanding obligations on Feb. 28, 1953.

In 1944, you appropriated $135,000, and there was expended by the Administration $65,000, and $69,000 was returned to the Treasury.

In 1945 you appropriated $140,000; $89,164 was expended by the Administration and $91,682 was returned to the Treasury.

In 1946, $110,000 was appropriated. We expended $91,682, and $18,000 was returned to the Treasury.

In 1947 you appropriated $100,000. We expended $95,000; $4,678 was returned to the Treasury.

In 1948 you appropriated $125,000. We expended $124,500, and $453 was returned to the Treasury.

In 1949 you appropriated $391,000. We expended $277,000, and $113,729 was returned to the Treasury.

In 1949 there was also expended from the continuing fund the $78,765 previously mentioned.

In 1950 you appropriated $525,000. We expended for the O. & M. operations $267,087, and had a saving of $257,913, which was utilized in the construction program and reprograming in future years, pursuant to Congress which approved the construction program. That was possible because the appropriation was available until expended.

In 1951 you appropriated $760,000. We utilized $638,000. There are no unliquidated obligations against that appropriaton, and $121,435 will be returned to the Treasury.

In 1952 you appropriated $1,255,712. We utilized $1,028,492 and $227,220 has been saved. There are obligations outstanding against that of $4,887. The balance of it will be returned to the Treasury.

APPROPRIATIONS FOR 1953

Mr. JENSEN. What did we appropriate for operations and maintenance purpose for the fiscal year 1953?

Mr. CONDER. $1,450,000.

Mr. JENSEN. How much do you anticipate you will spend out of that fund for the fiscal year 1953?

Mr. WRIGHT. We figure that there will be about $200,000 in savings there.

Mr. JENSEN. You anticipate that you will spend about $1,250,000?

Mr. WRIGHT. Yes, sir.

Mr. JENSEN. And that you will save $200,000. What is your request this year?

Mr. WRIGHT. The request this year is for $1,900,000, I believe.

PROGRAM NOW PRINCIPALLY ONE OF OPERATIONS

Mr. JENSEN. While we are on that, why do you ask for that much more money this year?

Mr. WRIGHT. Mr. Chairman, this Administration has moved from principally a construction program into a complete operating program and all of these transmission facilities are expected to come into operation and require operation during the coming year. Whereas the overhead of the Administration has previously been charged against construction activity, now because construction is drawing to a close and the only activity of the Administration is operations, the actual overhead itself all becomes a part of the operating cost.

Mr. JENSEN. Do you really think that you need that full amount of $1,900,000?

Mr. WRIGHT. No, sir, I do not.

Mr. JENSEN. How much will you need?

Mr. WRIGHT. I think I will need $1,800,000.

The reason for that is this: when these estimates were prepared and when we were before the Bureau of the Budget, we expected to have certain operations and transmission lines come into use and that certain line crews would be employed. We find that these facilities will come in later than estimated. Therefore, we are proposing a reduction of $100,000 in that item.

Mr. Chairman, there are other items that have changed the situation, such as this Supreme Court decision in Arkansas which changes the budget that we have before this committee.

In discussing them in detail I would like to take the justification sheets and go right through them with the committee so that you can see exactly what those items are.

Mr. JENSEN. All right. While you are doing that, tell the committee, please, what you think you should have to carry on your business, the least you can get along with.

Mr. WRIGHT. Yes, sir; I will.

PROJECT REPORT

Before undertaking that, Mr. Chairman, there is one further item of information that I would like to leave with the clerk of the committee, not as a matter of record, but so that the committee members, if they desire it, will have it available. I have here the annual reports for the Denison, the Norfork, the Narrows, and the Bull Shoals Dams individually, which I believe will give you complete information on these projects.

Mr. JENSEN. Did you ask that they be placed in the record?

Mr. WRIGHT. No, sir, I did not, because they are rather voluminous. I believe they would encumber the record, but they show exactly what those dams did last year, and we will give the committee copies of similar reports every year.

(Discussion off the record.)

Mr. JENSEN. I believe, for the record, we should have the facts regarding the amount originally estimated, the amount of money that has been expended to date, and the amount required to complete these projects if they are not completed yet. I would like to have you furnish that.

Mr. WRIGHT. We shall be very happy to furnish that, sir.

Mr. JENSEN. Would you fill out a regular form which we are using for reclamation for each one of these projects?

Mr. LARSON. For each of the projects referred to here?

Mr. JENSEN. Yes. Then we will put those formats in the record explaining each project instead of this voluminous report.

Mr. LARSON. We will utilize the items which apply to the particular projects.

Mr. JENSEN. We will place them in the record, without objection.

(The matter referred to follows:)

Summary of the estimated construction costs as shown by the authorizing documents and the current estimated construction costs on the flood-control projects in the Southwestern Power production area.

Project	Estimated cost when authorized [1]	Estimated construction costs [2]	Recommended construction costs allocation by—	
			Corps of Engineers	Southwestern Power Administration
Denison Reservoir	[3] $53,481,000	$59,950,000	$19,410,000	$19,410,000
Norfork Reservoir	[4] 27,500,000	28,090,000	12,635,000	12,635,000
Narrows Reservoir	[5] 6,470,000	12,660,000	4,942,000	2,972,115
Whitney Reservoir	[6] 8,263,000	41,562,300	11,522,700	6,325,500
Bull Shoals Reservoir	[7] 42,000,000	75,325,000	46,906,000	36,580,000
Fort Gibson Reservoir	[8] 13,700,000	43,192,800	21,331,299	14,380,800
Tenkiller Ferry Reservoir	[9] 14,020,000	22,575,000	13,235,527	11,215,000
Blakely Mountain Reservoir	[10] 11,080,000	32,365,000	24,521,000	21,265,000
Table Rock Reservoir	[11] 37,000,000	75,540,000	66,495,000	[12] 65,140,000
Total	213,514,000	391,260,100	220,998,526	189,923,415

[1] Cost data obtained from the individual authorizing acts.
[2] Data taken from cost allocation report prepared by Corps of Engineers, 1952.
[3] Authorized per H. Doc. 541, 75th Cong., 3d sess.
[4] Authorized per H. Doc. 290, 77th Cong., 1st sess.
[5] Authorized per H. Doc. 837, 76th Cong., 3d sess.
[6] Authorized per H. Doc. 390, 76th Cong., 1st sess.
[7] Authorized per H. Doc. 917, 76th Cong., 3d sess.
[8] Authorized per H. Doc. 107, 76th Cong., 1st sess.
[9] Authorized per Committee Resolution No. 1, 75th Cong., 1st sess., reauthorized per H. Doc. 758, 79th Cong., 2d sess.
[10] Authorized per H. Doc. 647, 78th Cong., 2d sess.
[11] Authorized per H. Doc. 917, 76th Cong., 3d sess.
[12] This allocation is based on cost data supplied by the corps which we have been unable to verify

Denison Reservoir Project

Location of project.—The Denison Dam is located on the Red River, 751 miles above the mouth of the river and 5 miles northwest of Denison, Tex.

Purpose of project development.—The project provides for flood protection to lands in Texas, Oklahoma, Arkansas, and Louisiana, for the generation of power, improvement of navigation, regulation of the flow of the Red River, and for other beneficial uses.

Authorization.—The existing project was authorized by the Flood Control Act approved June 28, 1938, and amended by section 4, Public Law 868, Seventy-sixth Congress, third session, approved October 17, 1940. For details, see House Document 541, 75th Congress, 3d session.

Allocation data [1]

Estimated cost of project in authorizing document	[2] $53,481,000
Current estimated cost as shown by the Corps of Engineers in their cost allocation report prepared in 1952	59,950,000
Original allocation to power by Corps of Engineers	[2] 15,202,000
Present recommended allocation to power by the Corps of Engineers, 1952	19,410,000
Southwestern Power Administration's recommended allocation to power, 1953	19,410,000

[1] Based on construction costs only.
[2] H. Doc. 541, 75th Cong., 3d sess., p. 64.

Analysis of operating revenue from sale of primary and secondary energy for the Denison project for each fiscal year

Fiscal year	Primary			Secondary			Total		
	Kilowatt-hours	Amount	Rate	Kilowatt-hours	Amount	Rate	Kilowatt-hours	Amount	Rate
			Mills			*Mills*			*Mills*
1945	46,303,024	$222,578.94	4.81	47,574,710	$47,574.71	1.00	93,877,734	$270,153.65	2.88
1946	136,249,652	650,295.08	4.77	108,308,848	108,308.84	1.00	244,558,500	758,603.92	3.10
1947	143,930,000	696,517.25	4.84	103,667,000	103,667.00	1.00	247,597,000	800,184.25	3.23
1948	133,686,703	758,564.88	5.67	31,837,000	31,837.00	1.00	165,523,703	[1] 790,401.88	4.78
1949	134,021,600	765,965.00	5.72	31,357,000	31,357.00	1.00	165,378,600	[2] 797,322.00	4.82
1950	138,452,437	1,003,385.81	7.25	25,138,000	25,138.00	1.00	163,590,437	[3] 1,028,523.81	6.29
1951	141,894,713	947,253.72	6.68	111,767,300	111,767.30	1.00	253,662,013	[4] 1,059,021.02	4.17
1952	127,222,769	[1] 924,831.50	7.27	22,086,200	27,607.75	1.25	149,308,969	[5] 952,439.25	6.38
Total	1,001,760,898	5,969,392.18	5.96	481,736,058	487,257.60	1.01	1,483,496,956	6,456,649.78	4.35

[1] Includes a decrease in funds received due to net billings in the amount of $329.41.
[2] Includes a decrease in funds received due to net billings in the amount of $1,374.
[3] Includes a decrease in funds received due to net billings in the amount of $2,984.85.
[4] Includes a decrease in funds received due to net billings in the amount of $1,255.95.
[5] Includes a decrease in funds received due to net billings of:

(*a*) Power purchased	$7,108.92
(*b*) Service charge	55,901.34
(*c*) Cost of sales to REA cooperatives	5,250.13
Total amount	68,260.39

Revenue during construction (not included in above total), $46,064.10.

Norfork Reservoir Project

Location of project.—The Norfolk Dam is located on the North Fork River about 4.8 miles above its confluence with the White River, near Norfork, Baxter County, Ark.

Purpose of project development.—The reservoir, which is one unit of a comprehensive plan for flood control and other beneficial purposes in the White River Basin, controls practically the entire drainage area of the North Fork River.

Authorization.—The existing project was authorized by the Flood Control Act approved June 28, 1938, as amended by the Flood Control Act approved August 18, 1951. For details of the authorized project, see House Document 290, 77th Congress, 1st session.

Allocation data [1]

Estimated cost of project in authorizing document	[2] $27,500,000
Current estimated cost as shown by the Corps of Engineers in their cost allocation report prepared in 1952	28,090,000
Original allocation to power by Corps of Engineers	[2] 14,310,000
Present recommended allocation to power by the Corps of Engineers, 1952	12,635,000
Southwestern Power Administration's recommended allocation to power, 1953	12,635,000

[1] Based on construction costs only.
[2] H. Doc. 290 77th Cong. 1st sess. p. 27.

Analysis of operating revenue from sale of primary and secondary energy for the Norfork project for each fiscal year

Fiscal year	Primary			Secondary			Total		
	Kilowatt-hours	Amount	Rate	Kilowatt-hours	Amount	Rate	Kilowatt-hours	Amount	Rate
			Mills			*Mills*			*Mills*
1945	39, 299, 400	$171, 029. 82	4. 35	44, 272, 000	$44, 272. 00	1. 00	83, 571, 400	$215, 301. 82	2. 58
1946	89, 989, 300	409, 857. 98	4. 55	86, 527, 000	86, 527. 00	1. 00	176, 516, 300	496, 384. 98	2. 81
1947	120, 488, 000	577, 975. 12	4. 80	78, 060, 000	78, 060. 00	1. 00	198, 548, 000	656, 035. 12	3. 30
1948	131, 311, 000	716, 479. 72	5. 46	10, 637, 000	10, 637. 00	1. 00	141, 948, 000	727, 116. 72	5. 12
1949	146, 461, 700	817, 022. 80	5. 58	38, 972, 900	48, 161. 38	1. 24	185, 434, 600	865 184. 18	4. 67
1950	159, 379, 408	877, 771. 82	5. 51	105, 309, 863	131, 637. 34	1. 25	264, 689, 271	1, 009, 409. 16	3. 81
1951	159, 413, 706	998, 416. 52	6. 26	45, 849, 576	57, 311. 97	1. 25	205, 263, 282	1, 055, 728. 49	5. 14
1952	213, 646. 707	1, 329, 400. 03	6. 22	127, 670, 730	159, 588. 42	1. 25	341, 317, 437	1, 488, 988. 45	4. 36
Total	1,059,989,221	5, 897, 953. 81	5. 56	537, 299, 069	616, 195. 11	1. 15	1,597,288,290	6, 514, 148. 92	4. 08

NOTE.—Revenue during construction (not included in above total), $112,475.21.

NARROWS RESERVOIR PROJECT

Location of project.—The Narrows Dam is located on the Little Missouri River above Murfreesboro, Ark.

Purpose of project development.—The Narrows Reservoir provides for flood control and other beneficial purposes on the Little Missouri River, Ark., and for local flood protection on the main river below Murfreesboro, Ark., and on the Terre Noire and Ozan Creeks.

Authorization.—The existing project was authorized by the Flood Control Act approved August 18, 1941. For details, see House Document 837, 76th Congress, 3d session.

Allocation data

Estimated cost of project in authorizing document	[1] [2] $6, 470, 000
Current estimated cost as shown by the Corps of Engineers in their cost allocation report prepared in 1952	[1] 12, 660, 000
Original allocation to power by Corps of Engineers	[3].
Present recommended allocation to power by the Corps of Engineers, 1952	[4] 4, 942, 000
Southwestern Power Administration's recommended allocation to power, 1953	[4] [5] 2, 972, 115

[1] Based on construction costs only.
[2] H. Doc. 837, 76th Cong., 3d sess., p. 4.
[3] Not available.
[4] This item is investment costs, that is construction costs plus interest during construction.
[5] The Southwestern Power Administration has recommended an allocation to power of only the identifiable power facilities.

Analysis of operating revenue from sale of primary and secondary energy for the Narrows project for each fiscal year

Fiscal year	Primary			Secondary			Total		
	Kilowatt-hours	Amount	Rate	Kilowatt-hours	Amount	Rate	Kilowatt-hours	Amount	Rate
			Mills			*Mills*			*Mills*
1951	26, 764, 050	$163, 196. 49	6. 10	2, 455, 330	$3, 069. 17	1. 25	29, 219, 380	$166, 265. 66	5. 69
1952	41, 484. 250	[1] 200, 322. 58	4. 83				41, 484. 250	[1] 200. 322. 58	4. 83
Total	68, 248, 300	363, 519. 07	5. 33	2, 455, 330	3, 069. 17	1. 25	70, 703, 630	366, 588. 24	5. 18

[1] Includes a decrease in funds received due to net billings of:

(*a*) Cost of sales to REA cooperatives	$1, 306. 55
(*b*) Service charge	4, 871. 80
Total amount	6, 178. 35

Revenue during construction (not included in above total), $3,822.84.

Whitney Reservoir Project

Location of project.—The Whitney Reservoir is located on the Brazos River, in Texas, about 442 miles above the mouth of the river, 5.5 miles southwest of Whitney, Tex., and about 38 miles upstream from the city of Waco, Tex.

Purpose of project development.—The project will afford substantial flood protection to the city of Waco, Tex., and the lower Brazos River Valley and will provide for generation of hydroelectric power, and for other beneficial water uses.

Authorization.—The Flood Control Act approved August 18, 1941, approved the existing project in accordance with the recommendation of the Chief of Engineers in House Document 390, 76th Congress, 1st session.

Allocation data [1]

Estimated cost of project in authorizing document	[2] $8, 263, 000
Current estimated cost as shown by the Corps of Engineers in their cost-allocation report prepared in 1952	41, 562, 300
Original allocation to power by Corps of Engineers	Not Available
Present recommended allocation to power by the Corps of Engineers, 1952	11, 522, 700
Southwestern Power Administration's recommended allocation to power, 1953	6, 325, 500

[1] Based on construction costs only.
[2] H. Doc. 390, 76th Cong. 1st sess., p. 4.

Bull Shoals Reservoir Project

Location of project.—The Bull Shoals Dam is located on White River about 418.6 miles above its mouth in Baxter and Marion Counties, Ark., about 7 miles north of Cotter, Ark., and 10 miles west of Mountain Home, Ark.

Purpose of project development.—The reservoir, which is one unit of a comprehensive plan for flood control and other beneficial purposes in the White River Basin, is also for the generation of hydroelectric power.

Authorization.—The existing project was authorized by the Flood Control Act of August 18, 1941. For details, see House Document 917, 76th Congress, 3d session.

Allocation data [1]

Estimated cost of project in authorizing document	[2] $42, 000, 000
Current estimated cost as shown by the Corps of Engineers in their cost allocation report prepared in 1952	75, 325, 000
Original allocation to power by Corps of Engineers	[3]
Present recommended allocation to power by the Corps of Engineers, 1952	46, 906, 000
Southwestern Power Administration's recommended allocation to power, 1953	36, 580, 000

[1] Based on construction costs only.
[2] H. Doc. 917, 76th Cong., 3d sess., p. 3.
[3] Not available.

Fort Gibson Reservoir Project

Location of project.—The Fort Gibson Dam is located on the Grand (Neosho) River, 7.7 miles above its mouth, and about 5 miles north and east of Fort Gibson, Muskogee County, Okla.

Purpose of project development.—The reservoir will be operated as a unit of the three-reservoir system for dual-purpose flood control and hydroelectric power on the lower Grand (Neosho) River, and as one unit in the comprehensive plan for flood control of the Arkansas River Basin, and other beneficial purposes in the Arkansas River Valley.

Authorization.—The existing project was authorized by the Flood Control Act approved August 18, 1941. For details, see House Document 107, 76th Congress, 1st session.

Allocation data [1]

Estimated cost of project in authorizing document	[2] $13, 700, 000
Current estimated cost as shown by the Corps of Engineers in their cost-allocation report prepared in 1952	43, 192, 800
Original allocation to power by Corps of Engineers	[2] 8, 727, 000
Present recommended allocation to power by the Corps of Engineers, 1952	21, 331, 299
Southwestern Power Administration's recommended allocation to power, 1953	14, 380, 800

[1] Based on construction costs only.
[2] H. Doc. 107, 76th Cong., 1st sess., p. 4.

TENKILLER FERRY RESERVOIR PROJECT

Location of project.—The Tenkiller Ferry Dam site is located on the Illinois River 13 miles above its confluence with the Arkansas River about 7 miles northwest of Vian, and 7 miles northeast of Gore, Sequoyah County, Okla.

Purpose of project development.—The plan of improvement provides for flood control in the lower portion of the Illinois River Valley and in the Arkansas River watershed in Oklahoma and for the generation of hydroelectric power and other useful purposes.

Authorization.—The project, as authorized by the Flood Control Act, approved June 28, 1938, was subsequently modified by the River and Harbor Act, approved July 24, 1946. For pertinent details, see Flood Control Committee Document No. 1, 75th Congress, 1st session, and House Document 758, 79th Congress 2d session.

Allocation data [1]

Estimated cost of project in authorizing document	[2] $14, 020, 000
Current estimated cost as shown by the Corps of Engineers in their cost-allocation report prepared in 1952	22, 575, 000
Original allocation to power by Corps of Engineers	[3]
Present recommended allocation to power by the Corps of Engineers, 1952	13, 235, 527
Southwestern Power Administration's recommended allocation to power, 1953	11, 215, 000

[1] Based on construction costs only.
[2] H. Doc. 758, 79th Cong., 2d sess., p. 13, excluding transmission facilities estimated to cost $480,000.
[3] Not available.

BLAKELY MOUNTAIN RESERVOIR PROJECT

Location of project.—The Blakely Mountain project is located on the Ouachita River at the head of Lake Hamilton (pool of Carpenter Dam) and approximately 10 miles northwest of Hot Springs, Ark., in Montgomery and Garland Counties, Ark.

Purpose of project development.—This project provides for flood control and other purposes in the Ouachita River Basin and for the generation of hydroelectric power and other useful purposes.

Authorization.—The project was initially authorized by the Flood Control Act of 1938 but was subsequently reauthorized by the Flood Control Act approved December 22, 1944, and incorporated into the Ouachita River and tributaries project by the 1950 River and Harbor Act. For details of the project, see House Document 647, 78th Congress, 2d session.

Allocation data [1]

Estimated cost of project in authorizing document	[2] $11, 080, 000
Current estimated cost as shown by the Corps of Engineers in their cost-allocation report prepared in 1952	32, 365, 000
Original allocation to power by Corps of Engineers	[3] 8, 890, 000
Present recommended allocation to power by the Corps of Engineers, 1952	24, 521, 000
Southwestern Power Administration's recommended allocation to power, 1953	21, 265, 000

[1] Based on construction costs only.
[2] H. Doc. 647, 78th Cong., 2d sess., p. 5.
[3] H. Doc. 647, 78th Cong., 2d sess., p. 26.

Table Rock Reservoir Project

Location of project.—The Table Rock Reservoir site is located on the White River about 21 miles upstream from the Ozark Beach development, near Branson, Mo., and 528.8 river miles above the mouth of the White River.

Purpose of project development.—The Table Rock Reservoir is constructed for the control of floods on the lower White River Valley, the development of hydroelectric power, and for other beneficial uses.

Authorization.—The Table Rock project is a unit in the approved general comprehensive flood control and other purposes in the White River Basin as set forth in the Flood Control Committee Document 1, 75th Congress, 1st session. For details of the project as authorized, see House Document 917, 76th Congress, 3d session.

Allocation data [1]

Estimated cost of project in authorizing document	[2] $37,000,000
Current estimated cost as shown by the Corps of Engineers in their cost allocation report prepared in 1952	75,540,000
Original allocation to power by Corps of Engineers	[3]
Present recommended allocation to power by the Corps of Engineers, 1952	66,495,000
Southwestern Power Administration's recommended allocation to power	[4]

[1] Based on construction costs only.
[2] H. Doc. 917, 76th Cong., 3d sess., p. 3.
[3] Not available.
[4] The Southwestern Power Administration has made some cost allocation studies on the Table Rock project; however, we do not have available adequate, reliable cost information from which to prepare a dependable allocation of costs on this project.

Construction

BUDGET CHANGES FOR 1954

Mr. Wright. Mr. Chairman, if you will turn to page 3 of the justifications, the construction program, I will indicate to the committee the changes in the budget estimate that we believe proper due to changed circumstances since this estimate was considered by the Bureau of the Budget and presented to the Congress.

The changed circumstances are two:

First, the Supreme Court of Arkansas has denied to the Northwest Arkansas Cooperative the right to construct a proposed generating and transmission system in northwest Arkansas. As a result of that decision our proposed connection with the group can be and should be eliminated.

Furthermore, during the last year we entered into a contract with the Arkansas Power & Light Co. and the Reynolds Metal Co. for service in the proposed aluminum plant or mill near Arkadelphia.

It was originally thought that a transmission line from a connection on the Denison-Norfork line at a point near Russellville down to Russellville would be necessary to interconnect with the Arkansas Power & Light Co.'s system. The studies which have just been completed indicate that this connection is not necessary. This also carries with it the elimination of an item in the proposed budget.

Mr. Jensen. Let us start on page 3 of the justifications.

Mr. Wright. Yes, sir.

Mr. Jensen. You have a request here for construction for the Gore switching station, $3,000.

Mr. Wright. That is overhead to carry on the construction work under way which is already appropriated for, a necessary facility still needed in the budget item.

Mr. Jensen. The next item is "Tupelo switching station, $3,000."

Mr. WRIGHT. That is the same situation, and the $3,000 is needed. The same answer applies for the $13,000 for the Anadarko substation.

Mr. JENSEN. Go to the next page.

Mr. WRIGHT. On the next page we find $15,000 for the Springfield substation, which is overhead to carry on construction during the fiscal year, and $25,000 for the Clinton substation.

Mr. JENSEN. $15,000 for the Springfield substation?

Mr. WRIGHT. Yes, sir.

Mr. JENSEN. You say that is for what purpose?

Mr. WRIGHT. That is for overhead to carry on construction work during the fiscal year 1954.

Mr. JENSEN. You mean administrative overhead?

Mr. WRIGHT. Yes, sir; engineering costs and other costs during the year because they are only appropriated for from year to year, they are not included in the moneys previously appropriated.

There is absolutely no new construction work and no new items except administration and overhead.

Mr. JENSEN. What about the Clinton substation?

Mr. WRIGHT. The same is true and also the Carthage substation, and the Springfield dispatching and warehouse building. In the case of the Ozark substation, the $18,000 included for overhead can be cut out because we are no longer going to build that item.

The $3,000 at the bottom of page 5, the next item is overhead for completion of the Weleetka substation, which is needed.

On page 6, under "System communication and dispatching" we find an item of $252,000.

Mr. JENSEN. How about Fort Gibson-Okay line, $6,000, and the Fort Gibson substation, $25,000?

Mr. WRIGHT. I think those items should stay in for the reason that we are making a study with the Oklahoma Power & Light Co. and the Grand River Dam authorities as to whether that project is needed. If it is not needed it can go out. If it is needed we will have to have these items to carry it out.

Mr. JENSEN. Will you know before we mark up the bill in about 30 days?

Mr. WRIGHT. Possibly I will.

Mr. JENSEN. Will you notify us?

Mr. WRIGHT. Yes, sir.

The next item is "System communication and dispatching." The figure in the budget is $252,000. I think it should be $250,000.

Mr. JENSEN. Since the Supreme Court ruling of Arkansas, do you not think we have a right to expect the system of communication and dispatch is going to be considerably reduced?

Mr. WRIGHT. No; there was not any material system of communication and dispatch involved in that Arkansas item.

Mr. JENSEN. This is for construction of the system of communication and dispatch.

Mr. WRIGHT. This is radio-control equipment and various equipments needed to carry that on.

Mr. JENSEN. To synchronize the dams?

Mr. WRIGHT. That is right. We suggest that be made $250,000, which it should have been in the first place. Nobody can estimate $252,000 on a $250,000 item.

On page 7 there is an item of $800,000 for the Ozark Substation extension, and the Ozark-Russellville line. That entire $800,000 should be eliminated as a result of not needing the facility to carry out the aluminum-company contract.

On page 8 there is an item of $15,000 for "Plans and specifications for future program," which represents planning work and work in connection with the Arkansas, Red River, and White River surveys. I believe that is the minimum we can safely ask Congress for.

Mr. JENSEN. All right.

Mr. WRIGHT. Now, the "General plant and equipment" item on page 8 is carried at $304,500. Because of the setting back of the dates when these operations will really come in, we expect to utilize only 8 line crews instead of 9, and that item should be reduced $40,000, and $264,500 should be adequate for the purpose requested.

TOTAL CONSTRUCTION ESTIMATE

The last of the suggested reductions are these. The total requested appropriation for "Construction" shown at the bottom of page 8 is $1,504,000. We believe an appropriation of $644,500 in total will be adequate for the construction needs of the Southwestern Power Administration.

This reduction is occasioned by the change in circumstances which I have outlined to the committee.

SAVINGS IN PREVIOUS APPROPRIATIONS

Now, these same changes in circumstances enable us to point out to the committee savings in previous appropriations which we believe can now safely be rescinded and returned to the Treasury.

In order to understand these changes, may I suggest that we start from the basic change, which is the elimination of the Ozark Substation shown at the bottom of page 4? You will note that the total estimated cost for the Ozark Substation was indicated as $581,931.

Mr. WRIGHT. Of that, there has already been obligated $318,931 for the purchase of a transformer and for the purchase of a circuit breaker and certain potential transformers, leaving a balance of $245,000 that can be rescinded or reduced from our appropriation.

Furthermore, the transformer that has been bought, the circuit breaker that has been bought, and the potential transformer can be transferred to the Clinton Substation and the Carthage Substation, so that funds available in appropriations for the Clinton Substation can be reduced by $51,000 and the Carthage Substation by $47,000.

Then at the bottom of page 6 there was appropriated for administration and engineering on contractual arrangements with rural cooperatives and private utilities an item of $175,000.

Because of the failure of the materialization of the contractual relations with 12 companies and others during the current fiscal year, there was expended out of that fund estimated as necessary to complete this expense only $37,500. So, $138,000 of that item may safely be rescinded and returned to the Treasury.

TOTAL UNOBLIGATED BALANCE NOT NEEDED

The net result of previous appropriations is that we feel because of the elimination of the Ozark substation and the savings effectuated in the estimate for contractual relations that previous appropriations in the amount of $501,500 may safely be rescinded and returned to the Treasury.

That would be the total of previous appropriated funds in construction which we do not need, $501,000 previously appropriated with net new money for construction for fiscal year 1954 in the amount of $640,000.

If there were some way—and I offer this purely as a layman's idea—in which Congress would permit us to use this $501,000 for the new items, then we would need additional money for construction to complete our program of only $140,000; that is, for this coming year, 1954.

Mr. JENSEN. That would be as broad as it is long.

Mr. WRIGHT. That is correct.

Mr. JENSEN. We could simply allow you to utilize the $501,000 and then appropriate a balance of how much?

Mr. WRIGHT. $139,500.

Mr. JENSEN. And the two funds together would take care of this item?

Mr. WRIGHT. That is correct.

MISCELLANEOUS CONSTRUCTION

There is a new item under the construction program miscellaneous construction as recommended to the Congress and the Congress has appropriated on several occasions a considerable amount of money.

Mr. WRIGHT. It is to meet miscellaneous construction costs estimated at $1,243,129, which includes some $656,871 of construction in progress. The balance of the $1,243,000 is needed for making connections to the intended customers in the miscellaneous construction system, which are listed in detail.

We have this problem, gentlemen, that I do not like to ask Congress for an item of money when I do not know what I am going to need it for. We have a community, we will say, that lies 10 miles from an existing transmission facility which is asking us for electrical service. We do not have the funds in the miscellaneous construction fund to make the necessary connection for that, and the person owning that transmission facility does not want to do it. Now, in such a case it means that we cannot serve that customer until we have come to Congress to ask money for the connection. This is in order to comply with what Congress has asked us to do, namely, tell you what towns we are going to make connections to. We are asking no new money whatsoever in this item, but simply asking Congress to permit us to complete these miscellaneous construction items for which you have provided money in the event they all become necessary. Some of them may not become necessary.

Mr. JENSEN. I think, in that connection, I want to read into the record from the committee report for the fiscal year 1953 regarding this item:

Of the amount allowed for this item, $400,000 is programed for miscellaneous construction. These funds are used for the construction of short extensions to transmission lines in order to serve the Government's customers and for improvements and additions, including the acquisition of minor facilities, to permit continuity of service or to maintain a recognized standard of service. The committee is recommending funds for this purpose in 1953, as it did in 1952, to provide only for completion of construction which may be now in progress. However, the committee does not intend to provide any construction funds after the fiscal year 1953 for line extensions, facility improvements, or acquisition of the same unless the expenditure items are specifically identified and justified in the budget presentation.

Now, that was the position which the committee took last year.

Mr. WRIGHT. Yes, sir.

Mr. JENSEN. Which states that the committee will make no further appropriations for such function unless you are in a position to state specifically just where these funds shall be used. Now, are you in that position today?

Mr. WRIGHT. We are not asking for any appropriations; we are not asking for any this year, and we specifically indicate where the funds would be used that have already been appropriated. That is indicated in the justifications.

BALANCE IN MISCELLANEOUS CONSTRUCTION FUND

Mr. JENSEN. How much money do you have left in that fund?

Mr. WRIGHT. We have authority for $1,243,000. There is about $656,871 included in work under construction. That would indicate that there is left, in round numbers, around $600,000 to be applied to these other items that are set up in the budget. Now, I think that there are some more.

Mr. CONDER. $1,243,000 is available. We requested permission from the Secretary for that construction, but it has not been approved.

Mr. WRIGHT. I misinformed the committee by misreading this note. There is actually available now, and that has not been obligated, $1,243,129. This is in addition to $656,871 new construction, but the $1,243,000 is to be applied individually to the indicated customers as set forth in the justifications on pages 7 and 8, and if expended must be expended after approval by the Secretary for those specific towns. We are not requesting any additional appropriations in line with the committee direction.

In other words, answering your question, there is $1,243,000 left in the fund.

NEED FOR MISCELLANEOUS CONSTRUCTION FUNDS

Mr. JENSEN. I believe you stated, Mr. Wright, in the event the private utilities do not see fit to build the necessary transmission lines to serve the people in any area, where only a short line is necessary to give them electric service, then in that case you use this fund to build such transmission lines; is that correct?

Mr. WRIGHT. That is correct, and one of the provisions of the contract with the utility companies says this:

Whenever a new facility must be constructed solely for the company for the sole purpose of serving a Government customer, the utility may not give the desired delivery point, but will have to give the nearest point on their existing system for such service.

In other words, if we ask for a point 5 miles off the utility company's which would cost $100,000 to serve 1 kilowatt, they would say:

We cannot do that; we will make it to you 5 miles from the point you want it.

Mr. JENSEN. In the event the REA cooperatives would say to you:

We have sufficient money to build that transmission line and are ready to build it.

Then in what position does that leave you and the private utilities?

Mr. WRIGHT. If they did build it, we would give them service at the existing rate of the company system. We would ask them to do it, probably, in the first place. Several of these contracts are also coming off of our heavy lines, or lines which we have carrier contracts on. If you have a carrier contract and the cooperative charge is the same as the company contract——

Mr. JENSEN. When you say "carrier contract," do you mean wheeling contract?

Mr. WRIGHT. Yes, sir. We are building a short extension for Poplar Bluff and Springfield, Mo., right at the present time, which was previously approved under this fund.

That completes, gentlemen, our idea with respect to the item for construction.

OPERATION AND MAINTENANCE

Now, if you will turn to page 21, I will indicate to you the reductions, because of change in services, that I believe can be made in the operation and maintenance budget.

As I told you, this was occasioned by the fact that the delay in coming into operation of certain facilities makes it possible for us to get by with a total of 8 transmission line crews, instead of 9, and to hire some of the men at a later date.

In order that you can understand a little bit of the Southwestern Power operation, I would like to present to the committee a brief statement of our present personnel.

PERSONNEL

Southwestern Power Administration now has employed 268 people, as of the 17th day of January. Of this 268 people, 128 are veterans and wage-hour employees number 70 persons. Of these 70 persons, there are fourteen 10-point veterans, twenty-eight 5-point veterans, and 28 nonveterans, for a total of 70. There are 198 classified employees, of which 62 are 10-point veterans; 24 are 5-point veterans, and the classifications range from GS–16 to CPC–5.

If the committee would like, I shall be glad to present for the committee's information a tabulation of the personnel of the Administration.

Mr. JENSEN. We will insert that into the record.

(The matter referred to follows:)

Summary Jan. 17, 1953

CLASSIFIED EMPLOYEES

Status:	
Permament	165
Indefinite	22
Excepted	8
Excepted, indefinite	3
Veterans:	
10-point veterans	62
5-point veterans	24
Nonveterans	112
Number of employees by grades:	
GS–16	1
GS–15	2
GS–14	9
GS–13	10
GS–12	10
GS–11	14
GS–10	2
GS–9	30
GS–8	4
GS–7	16
GS–6	5
GS–5	30
GS–4	32
GS–3	23
GS–2	7
CPC–3	2
CPC–5	1
Total classified employees	198

WAGE-HOUR EMPLOYEES

Status:	
Permanent	36
Indefinite	34
Veterans:	
10–point veterans	14
5-point veterans	28
Nonveterans	28
Total wage-hour employees	70
Total SPA employees	268
Total veterans	128

SALARIES

Mr. JENSEN. What is the average salary paid to your employees?

Mr. WRIGHT. I cannot answer that, Mr. Chairman, exactly. I believe the average grade is around a GS–7.2.

Mr. JENSEN. Do you know how much money you expended in fiscal year 1952, and how much you will expend in 1953?

Mr. WRIGHT. I have not made that computation.

Mr. JENSEN. I see. Your average grade is GS–7.2 for 1953 and your estimate for 1954 is GS–7.1.

What is the salary of a GS–7.1. I know you do not have such a grade, but we can easily figure it out. I would like to know what it is.

What is your salary for a GS–7?

Mr. WRIGHT. I will have to get that, Mr. Jensen; about $4,000, I believe.

Mr. JENSEN. I have it right here. It is $4,205 for a GS–7, so it would be one point more than that; it would run about $4,250 per person on an average?

Mr. WRIGHT. Yes, sir. In connection with that as an explanation, and not a justification of it, we are accomplishing contractually what in normal terms of individual operation would be accepted performance, and a great deal of highly professional and technical skill is required in operating; that is, between our group and the people with whom we contract, where you would not actually do the work, but you would have to work with committees to lay it out.

PROPOSED OPERATING SCHEDULE

Now, in order that you can understand fully, the committee will have available the complete physical layout of the proposed operating set up of the Southwestern Power Administration, I have prepared and will furnish the committee with copies of the detailed layout of the transmission crews, the labor crews and the patrol crews; the indicated mileage that crews run, the locale of the crews geographically, the number of the crews and what they consist of.

Mr. JENSEN. We would like to have that for the record.

(The material referred to follows:)

Locations of headquarters, operating centers, and crews

Town	Present establishment	Proposed establishment
Tulsa, Okla.	Headquarters, SPA.	Headquarters, SPA.
Muskogee, Okla.	Operations center, Oklahoma-Texas area.	Operations center, Oklahoma-Texas area.
	Line crew.	Line crew.
	Road and right-of-way crew.	Road and right-of-way crew.
	Meter and relay crew.	Meter and relay crew.
	Communications crew.	Communications crew.
	Substation maintenance crew.	Substation maintenance crew.
Springfield, Mo.	Operations center, Missouri-Arkansas area.	Operations center, Missouri-Arkansas area.
	Line crew.	Line crew.
	Road and right-of-way crew.	Road and right-of-way crew.
	Meter and relay crew.	Meter and relay crew.
	Substation maintenance crew.	Substation maintenance crew.
		Communications crew.
Denison, Texas	Line crew.	Line crew.
	Road and right-of-way crew.	Road and right-of-way crew.
Chickasha, Okla.	Line crew.	Line crew.
		Meter and relay crew.[1]
		Communications crew.[1]
Van Buren, Ark.	Patrol crew.	None.
Clarksville, Ark.	Road and right-of-way crew.	Do.
West Plains, Mo.	Patrol crew.	Patrol crew.
Poplar Bluff, Mo.	Do.	Line crew.
Fulton, Mo.	Line crew.	Do.
		Road and right-of-way crew.
		Communications crew.[2]
Altus, Okla.	None.	Patrol crew.
Fairview, Okla.	Do.	Line crew.
		Road and right-of-way crew.
Carthage, Mo.	Do.	Patrol crew.
Maries, Mo.	Do.	Do.
Clinton, Mo.	Do.	Line crew.
Ada, Okla.	Do.	Patrol crew.

[1] Detached from Muskogee.
[2] Detached from Springfield.

Locations of crews

Present	*1954*
LINE CREWS	
Denison, Tex.	Denison, Tex.
Chickasha, Okla.	Chickasha, Okla.
Muskogee, Okla.	Muskogee, Okla.
Springfield, Mo.	Springfield, Mo.
Fulton, Mo.	Fulton, Mo.
	Poplar Bluff, Mo.
	Clinton, Mo.
	Fairview, Okla.
PATROL CREWS	
West Plains, Mo.	West Plains, Mo.
Poplar Bluff, Mo.	Maries, Mo.
Van Buren, Ark.	Ada, Okla.
	Altus, Okla.
	Carthage, Mo.
ROAD AND RAILWAY CREWS	
Denison, Tex.	Denison, Tex.
Muskogee, Okla.	Muskogee, Okla.
Springfield, Mo.	Springfield, Mo.
Clarksville, Ark.	Fulton, Mo.
	Fairview, Okla.
METER AND RELAY CREWS	
COMMUNICATION CREWS	
SUBSTATION MAINTENANCE CREWS	
Muskogee, Okla.	Muskogee, Okla., with detached segments at Chickasha, Okla.
Springfield, Mo.	Springfield, Mo., with detached segment at Fulton, Mo.

Number and composition of crews, 1954

8 line-maintenance crews:	
Foreman	1
Lead lineman	1
Linemen	2
Groundman	1
Truck drivers	2
Apprentice lineman	1
Depot clerk	1
Men per crew	9
5 road and right-of-way crews:	
Foreman	1
Bulldozer operator	1
Laborers	3
Men per crew	5
3 meter and relay crews: [1]	
Instrument repairman (meter)	1
Instrument repairman (relay)	1
Men per crew	2
5 patrol crews:	
Lineman	1
Groundman	1
Men per crew	2
2 substation maintenance crews:	
Foreman	1
Lead electrician	1
Electricians	2
Men per crew	4
2 communications crews: [1]	
Radio repairmen	2
Men per crew	2

[1] Meter and relay crews and communications crews are augmented to permit detachment of 1 or 2 technicians to outlying depots while still a part of and available to the area crew.

Location and mileage of line-maintenance depots

	Miles
Denison, Tex., depot	232
Chickasha, Okla., depot	425
Altus patrol crew	176
Muskogee, Okla., depot	225
Ada patrol crew	100
Springfield, Mo., depot	416
Carthage patrol crew	271
West Plains patrol crew	163
Poplar Bluff, Mo., depot	165
Fulton, Mo., depot	330
Maries patrol crew	237
Clinton, Mo., depot	249
Fairview, Okla., depot	455
Total	3,444

Location and mileage of labor crews

	Miles
Denison, Tex	645
Muskogee, Okla	325
Fulton, Mo	816
Springfield, Mo	1,015
Fairview, Okla	643
Total	3,444

Mr. WRIGHT. Briefly, in 1954, we propose 8 line crews, 5 patrol crews, and 5 labor crews, with meter and leader crews, communication crews and substation crews, I think, 2 of each. A line crew consists of 8 men, a foreman, a lead lineman, 2 linemen, a ground man, 2 truck drivers, an apprentice lineman, and a depot clerk.

The maintenance crew consists of 5 men per crew as a labor crew; the meter and leader units, 2 men per crew; the communication units, 2 men per crew; the substation unit, 4 men per crew, and the patrol unit, 2 men per crew.

The Denison crew will handle 232 miles of line; the Chickasha crew will handle 425 miles of line; the Muskogee crew will handle 225 miles of line; the Springfield crew 416; the Poplar Bluff depot has 165 miles; the Fulton depot 330; the Clinton depot 249; the Fairview depot 455, and the difference in mileage being whether it is light line or heavy line. The total mileage involved is 3,444 miles.

LINE MAINTENANCE COSTS

Mr. JENSEN. How does your total mileage of line to be maintained compare with 1953?

Mr. WRIGHT. We have right now around 1,012 miles of line. We will have at the end of this year, 3,400, if all the contractual relationships are resolved. If they are not resolved, there will be a further material decrease in this item. In other words, if the Federal law should say our contracts with the cooperatives are not legal, then, we would not take over the maintenance and operation of these G. and T. lines and our present operation just would not be expanded from 5 crews to 8. As a matter of fact, they would probably be cut down from 5 to 4. That is an item that I cannot determine, not even with the dates staged for these operations coming in.

Mr. JENSEN. Mr. Wright, do you know your cost per mile of line—in maintenance of your line, compared with private utilities?

Mr. WRIGHT. Yes; I think we do. We do not have a real comparison yet, because we have been in the process of setting up a maintenance and operation organization, but the maintenance and operation costs of the private utilities in the area has been the guide at which we are shooting and which we shall try to better. That has increased from $180 a mile to $225 a mile.

We are aiming at a cost, Mr. Anderson, of what a mile?

Mr. ANDERSON. About $230 a mile at the present time.

Mr. WRIGHT. If we can beat that, we will lower it.

OPERATIONS AND MAINTENANCE BUDGET CHANGES

On the operations program, there are some reductions that can be made on the basis of the changed time these operations will start.

On page 21 you have three items. System operation and maintenance is indicated for 1954 as $1,105,000. We believe this can be reduced to $1,019,000.

We believe that this can be reduced to $1,019,300 and instead of having an increase of $170,000 the increase would be $84,300. The power marketing as indicated at $95,000, we believe this can be reduced to $86,380, exactly what it is today without any increase.

General administration as indicated at $700,000, we believe this can be reduced to $694,320, which is the same as it is today and there would be no increase in that. That would make a total of $1,800,000 instead of $1,900,000.

Mr. JENSEN. Mr. Wright, is it not fair to assume that since you have your construction pretty well completed that general administration will require less people? It appears to me that with a reduction there below the present figure, it would be justified.

Mr. WRIGHT. This general administration item is applicable to the operation and maintenance activity.

Now I agree with you that it seems that with a reduction from a construction item and change to an operating item that the possibility of change of administrative cost exists. The reason why I feel that we cannot do it in Southwestern, any more than I have indicated already, is this: It is true that our construction program by us directly is practically coming to a close during that fiscal year and will be comparatively small, but we have been, not only with the G. and T.—forgetting them—we have secured through contractual relationships tremendous systems of others which we utilize, that require study on our part every time we utilize the system and work with the companies, which requires overhead, Mr. Chairman, which does not appear to be necessary from the size system we have built.

We are cutting it everywhere we can, but when we make a request to a company for service of a particular customer, our contract provides that the company will tell us what facilities they plan to use and we check them and let the company know whether they are adequate to meet our purpose. That requires a certain staff as though we were checking our own system.

In operating the dams certain requirements are made as to the utilization of the storage and water supply available. This requires operating committees between us and the company who does the dispatching. We have coordinating committees and these operating committees are an economy, because you can make more money in

one day by proper operation than it will cost you to use these people all year round at one of these dams, if you misuse the water.

I will tell the committee this: At the moment the least I see I can operate on is $1,800,000 in the coming year, if the G. and T. system is coming into our control. If they do not come into our control, we will be able to operate on considerably less than that, because we would not expand our maintenance and operating crews to take on those lines.

Mr. JENSEN. You used the expression "considerably less"; can you give us a figure?

Mr. WRIGHT. Yes, sir; I think we could do it for $150,000 to $200,000 less. Furthermore than that, if I find that we can save any money anywhere in these estimates, we will save it, as we have done in the past years.

Mr. JENSEN. How many wholesale customers does Southwestern now have and how many does it expect to have in fiscal year 1954?

Mr. WRIGHT. I furnished the committee with a detailed list of those awhile ago.

We have 25 cooperatives in Texas, 6 cooperatives in Oklahoma and 11 towns and 1 military installation, 1 in Arkansas and 2 in Missouri, which is 46. We have in the neighborhood of 50 customers at the present time and we expect to expand that to probably 150 within the coming year.

Mr. JENSEN. The Southwestern Power Administration as such does not deliver any power to private individuals or homes?

Mr. WRIGHT. It does not deliver any power at all to retail customers.

Mr. JENSEN. So you do not have the bother of sending out monthly statements or collecting from the individuals?

Mr. WRIGHT. We do not from individuals.

Mr. JENSEN. You render a bill to these approximately 50 wholesale customers each month and whether it be a cooperative or private concern or municipality, then, of course, they, in turn, collect from their individual customers?

Mr. WRIGHT. Yes, sir.

Mr. JENSEN. It is a rather small matter to render those bills. You know every day, do you not, just how much power has gone to each one of your wholesale customers?

Mr. WRIGHT. No; we know only at the end of the month. We read the meters at the end of the month.

Mr. JENSEN. Of course, you could know each day, because it would not be too much trouble to check it.

Mr. WRIGHT. There would be no necessity to read them every day.

Mr. JENSEN. No; there would be no benefit from it, but it is a rather small matter to read your meters at the end of the month and to determine that their bills are so much. You render them a bill at the end of each month.

What is your rate charge now to cooperatives?

POWER RATES AND COSTS

Mr. WRIGHT. The rate charge now to cooperatives averages about 5.6 mills to 5¾ mills.

Mr. JENSEN. And what is your charge to private utilities?

Mr. WRIGHT. The charge to private utilities averages in the order of 7 mills a kilowatt an hour.

Mr. JENSEN. And to municipalities?

Mr. WRIGHT. The municipalities or municipal bodies receive the same rate as to cooperatives, which is 5.6 to 5¾ mills.

Mr. JENSEN. Going back to a statement you made, Mr. Wright, at the outset of your remarks. You said that hydroelectric power was the highest cost power that is produced; you also said that this committee should know what each one of these projects cost and that knowing the cost, it would be a small matter to figure out what the rate should be that you charge for a kilowatt-hour in order to make the project pay out according to law.

Congress has a pretty difficult problem in the fact that you sold power several years ago for about the same price you are selling it now, and that is true all over America, but operation, maintenance, and construction costs have gone up possibly 85 percent over a period of the last 7 or 8 years.

Now, if we were to charge, say, 85 percent more for hydroelectric power than we charged 7 or 8 years ago when these rates were set, in your opinion what would happen?

Mr. WRIGHT. You would price yourself out of the market. You would price it higher than you could actually sell it for.

Mr. JENSEN. In other words, they would turn to other places and to other means of getting their power?

Mr. WRIGHT. That is correct in my judgment.

Mr. JENSEN. I understand they are now producing power in the steam plants, using oil, coal, or gas for fuel, for less than 4 mills a kilowatt-hour.

So, if we were to charge today the rate that we should charge according to law for this hydroelectric power, it would possibly run up to at least a cent a kilowatt—10 mills or more—and, as you say, we would price the Federal power out of the market. So, there we have a problem.

We have to dispose of this Federal hydroelectric power in order to try to pay off these great costs and these great obligations which we have made in the building of these powerplants all over the country, but we are "on the hook," so to speak. We simply cannot charge what we should, and so we must do the best we can.

Mr. WRIGHT. That is right.

Mr. JENSEN. We are not justified in leaving these rates where they are, especially on these projects that are now under construction, which are costing at least twice as much as the original estimate on which the proposed rate was based.

Take for instance, the Missouri Valley: we promised the people out in that valley, the REA and the public bodies, that we were going to sell power for 5½ mills. That is what the Bureau of Reclamation promised and that was at the outset of the building program 7 or 8 years ago. We have been telling them all along up to this time that we were still going to let them have this power for 5½ mills, and, of course, a lot of people said, "Well, we want some of that cheap power."

Now, here we are in this dilemma that I have just explained. If we follow the strict letter of the law, we would have to charge in the neighborhood of 1 cent a kilowatt for Missouri Valley hydroelectrically

produced power. This we cannot do, because if we do, we will price ourselves out of the market.

We have quite a problem. We cannot subsidize these hydroelectric projects to such a degree that finally the people who do not get the direct benefits are going to say, "Well, that is enough of this; we do not like to pay part of John Brown's electric-light bill."

That is what the people are soon, I am afraid, going to say in these other sections that do not get the advantage of this power. We have the projects under way and we cannot stop them, because many of them are multiple-purpose projects, flood-control projects, as well as hydroelectric projects, and also for navigation and other things.

It is a problem that is facing us today. It is right out in front of us, and we can see it and recognize it, and we have to meet it as best we can.

SYSTEMS INTEGRATED TO MINIMIZE THE POSSIBILITY OF SUBSIDY

Mr. WRIGHT. That is correct, Mr. Chairman, and at Southwestern we have attempted to meet it by adopting this integration program, which will enable us to market the hydroelectric power as peaking power at the highest price anybody can afford to pay, and we expect to get in return power that we can sell to the preferred customers and accomplish the objectives of the Food Control Act.

But I agree with you that you cannot sit in this chair and say that hydroelectric power is cheap; and I think the Congress ought to know before they start these projects, as fully as they can, what they are going to cost and what they will produce, and I do not think they ought to be changed a number of times during construction, without the full knowledge of Congress and the full understanding by Congress of what the changes in the end will do to the product to be marketed from them.

We have an example at Fort Gibson Dam. That project was authorized to cost $13 million, total cost; $8 million is set out of that amount as expected to be allocated to power, and $5 million to be allocated to flood control. That project actually cost something in the order of $47 million.

Mr. JENSEN. That bears out what I said.

Mr. WRIGHT. Something in the order of $18 million to $28 million is to be allocated to power. It would have been much easier for power to support the entire cost of the original project than what must now be allocated to power. Fort Gibson is coming on the line, producing power for us, in the next 2 or 3 months. We have to find some way, as marketing agent, to come as near getting what should be reasonably allocated to power as we can, but my point is: Let us see, as well as human beings can see, before we go into these things what we are getting into.

My administration, which was investigated by one of the committees of Congress, probably came in for certain comments with regard to allocation of power costs. We have got a bear by the tail here, and we cannot turn him loose until we get the best hold on him someplace else. We do not want to hold on to the tail, because we know that is not the best place to hold on to, but we are going to get him by the best place we can before we turn loose.

We are going to try to get out of Southwestern power, I believe, through the advantages of this integration—we are going to be able to pay out with the projects that are on the griddle down there now, but we will not if we get a bunch more of them.

Mr. JENSEN. Your only answer to the situation in which we find ourselves is, as you have just explained: That we must integrate this hydroelectric power into the entire transmission system of private utilities, municipalities, and cooperatives in order to justify the cost of these hydroelectric power projects. By so doing, the adequacy of the service which we render to everyone in those areas will justify the expenditure that we now make for these great projects; and, because of these areas being fully developed and being assisted in the production of not only foodstuffs but fibers and manufactured articles, the cost will be justified to all the people in our Nation?

Mr. WRIGHT. I am satisfied that is the solution in the Southwest.

It seems to me from the limited knowledge I have that it would be applied in other areas to the extent that their situation is similar to ours.

I have not seen any place yet in my engineering knowledge that integration does not help.

Mr. JENSEN. I am sure of that.

CONTINUING FUND BUDGET CHANGES

Mr. WRIGHT. I have one item to tell the committee about, and that is the continuing-fund item. That is shown on page 44 of the justifications.

Because of the change of the time of these things coming in, the amount of money required for this item can be materially reduced.

The budget estimate indicates a total of $5,650,000 as being required in the continuing fund for fiscal year 1954. These studies indicate that, at the time these facilities would be available, this item can be reduced to $3,736,000.

I present to the committee for the record a revision or sheets to be used in lieu of those, and I believe pages 44, 45, 46, 47, and 48 of the justifications have a bearing on this. A restudy of those items, indicating the dates at which those expenditures will have to be made, is the basis for the calculation of $3,736,000 in lieu of $5,650,000. I believe that is a reduction of $1,914,000 in that item.

Mr. JENSEN. We will insert them in the record at this point.

(The material referred to is as follows:)

JUSTIFICATION—CONTINUING FUND

Power purchases, service charges, and rental of facilities, $3,736,000

Expenditures to be incurred in fiscal year 1954 under the continuing fund are based upon contractual arrangements for the purchase and sale of power, including service charges for transport of power with private utilities in the area, and for purchase of power and lease of transmission lines from power cooperatives in the area. Estimated fund requirements by activity are listed below.

	Purchase of power and service charges	Rental of transmission facilities	Total
1. Oklahoma utility companies	$112,800		$112,800
2. Other utility companies	60,900		60,900
3. M & A Electric Power Cooperative	25,100		25,100
4. Central Electric Power Cooperative	736,500	$503,000	1,239,500
5. N. W. Electric Power Cooperative	900,000	173,000	1,073,000
6. Western Farmers Electric Cooperative	715,700	340,000	1,055,700
7. KAMO Electric Power Cooperative		169,000	169,000
Total	2,551,000	1,185,000	3,736,000

Contracts have already been executed with each of the above power suppliers and users except for a group of 12 private utilities set forth in the tabulation above as "Other utility companies." A proposed contract with these companies has been submitted to the Secretary of the Interior for his consideration.

The estimated fund requirements by private utility and cooperative have been calculated in accordance with provisions within each individual contract and are presented herewith.

1. Payment to Oklahoma utility companies:
   - A. Charges from companies:
     - Purchase of power:
       - 9,458,000 kw.-hr. × $0.004 ..... $37,832
     - Service charge:
       - 99,159,000 kw.-hr. × $0.00125 123,949
     - Total charges $161,781
   - B. Sales to companies:
     - 3,398 kw. × $1.20 × 12 months ..... −48,932
   - C. Amount due companies 112,849
2. Payment to other utility companies:
   - A. Charges from companies:
     - Purchase of power:
       - 6,974,000 kw.-hr. × $0.004 ..... $27,896
     - Service charge:
       - 12,000,000 kw.-hr. × $0.001 ..... $12,000
       - 14,025,333 kw.-hr. × $0.0015 21,038
       - 33,038
     - Total charges 60,934
3. Payment to Missouri-Arkansas Electric Power Cooperative:
   - A. Service charge:
     - 20,100,000 kw.-hr. × $0.00125 25,125
4. Payment to Central Electric Power Cooperative:
   - A. Rental payments:
     - Transmission investment 9,859,000
     - $\frac{9,859,000}{1,000} \times 4 \times 12$ $473,232
     - Estimated overhead 29,768
     - Total 503,000
   - B. Purchase of power:
     - 115,000,000 kw.-hr. × $0.006405 736,575

5. Payment to North West Electric Power Cooperative:		
A. Rental payments:		
Transmission investment		$6,641,900
$\frac{6,641,900}{1,000} \times 4 \times 6$	$159,406	
Estimated overhead	13,594	
Total	173,000	
B. Pruchase of power:		
141,000,000 kw.-hr. for 6 months, $150,000 \times 6$	900,000	
	1,073,000	
6. Payment to Western Farmers Electric Cooperative:		
A. Rental payments:		
Transmission investment		8,408,000
$\frac{2,581,680}{1,000} \times 4 \times 12$	$123,920	
$\frac{4,398,431}{1,000} \times 4 \times 9$	158,343	
$\frac{863,261}{1,000} \times 4 \times 6$	20,718	
$\frac{564,628}{1,000} \times 4 \times 4$	9,034	
Total	312,015	
Estimated overhead	27,985	
Total	340,000	
B. Purchase of power:		
225,000,000 kw.-hr. (steam) $\times$ 9/12 equals 168,750,000 kw.-hr. $\times$ $0.0042	708,750	
5,000,000 kw.-hr. (diesel) $\times$ 4/12 equals 1,660,000 kw.-hr. $\times$ $0.0042	6,972	
	715,722	
7. Payment to KAMO Electric Cooperative:		
A. Rental payments:		
Transmission investment (1954)		6,375,176
$\frac{6,375,176}{1,000} \times 4 \times 6$	$153,004	
Estimated overhead	15,996	
Total	169,000	

PURPOSE OF CONTINUING FUND

Now, this continuing fund item, gentlemen, is for this purpose: It is the amount of money we calculate will be needed to meet the Government's obligations under its contract with the generating and transmission cooperative and utility companies which we have in the event those contracts become effective.

The Oklahoma utility contract indicates a requirement of $133,000, other utility companies $175,000, and the M. and A. contract, which is a wheeling type contract.

Mr. JENSEN. What does the M. and A. contract mean?

Mr. WRIGHT. That is the Missouri-Arkansas Electric Power Cooperative. The really large items in that, as you can see, are contained in the items for the Central Electric Power Cooperative, the

Northwest Electric Power Cooperative, the Western Farmers Electric Cooperative, and the KAMO Electric Power Cooperative.

Those items are both for the purchase of power and rental of transmission lines, and if the contracts with the generating transmission cooperatives were declared illegal, those amounts of money would not be needed. If they are declared to be legal, that amount of money will be required to meet the Government's obligations under the program, in our best judgment.

ARKANSAS SUPREME COURT DECISION

Mr. JENSEN. I have a memo here that was handed me by a person who has been looking into this matter in the Interior Department. In effect, this is what the memo says:

> It seems this fund can be largely, if not totally eliminated, since the Arkansas Supreme Court has held that SWPA has no legal right to purchase power as such. Also, it appears that a large part of the fund is, in effect, used to make partial payments on the purchase of transmission lines constructed by cooperatives. Section 5 of the Flood Control Act of 1944 provides the Secretary of Interior is authorized from funds to be appropriated by the Congress to construct or acquire, by purchase or other agreements, only such transmission lines and related facilities as may be necessary in order to make the power and energy generated at such projects available in wholesale quantities for sale on fair and reasonable terms and conditions to facilities owned by the Federal Government, public bodies, cooperatives, and privately owned companies. The Arkansas Supreme Court held that in its opinion Congress in setting up the continuing fund, which was $100,000 in 1943, under the First National Defense Supplemental Act (54 Stat. 611–621), to enable SWPA to defray emergency expenses and to maintain continuous operation, did not contemplate the acquisition of steam-generated power. The court further held that the Congress in its change in language related to the continuing fund when it was increased to $300,000 in 1950, did not intend it for the purchase of steam-generating power. The court, in effect, holds that SWPA only has the right to sell the output of Federal held plants and that any purchase of steam energy is limited to that required under wheeling contracts where SWPA delivers power at one point and purchases other power at some other point, but that the use of the fund for firming up hydrogenerated power was not intended by Congress.

Do you have any comments to make on that, Mr. Wright?

Mr. WRIGHT. If the Federal courts should hold the same as the Arkansas Supreme Court has held, obviously these contracts would be held to be illegal, in which case there would be no obligation by the Government. If, on the other hand, the Federal courts hold that the contracts are legal, then these amounts of money would be needed. That is the only comment I have to make.

Mr. JENSEN. I think, possibly, it is just about that simple.

Mr. WRIGHT. Yes, sir.

ALLOCATION OF COSTS BETWEEN FLOOD CONTROL AND POWER

Mr. NORRELL. There are 2 or 3 items, Mr. Wright, that I would like to pursue just a little further.

On these dams that are constructed either for flood control or reclamation, the power part of it, whether it is correct or incorrect—Congress is responsible for the existing situation.

The main idea of the expenditures of money is flood control and/or reclamation, as I understand it, but if a project is not economically feasible either for flood control or reclamation, or both, and can be made feasible by adding to the project the production of hydroelectric

power, then these are added together to make the project economically feasible.

Now, I think that is a correct statement of the situation today when it comes to the authorization of the projects by the Congress, as recommended by the Public Works Committee. The allocation for power, of course, is chargeable to power and so far as this committee is concerned, the rest of it goes to flood control and reclamation and that is handled in a different way. Now, that is a reasonable analysis of the law existing today regarding the authorization of these projects either for flood control or reclamation; is it not?

Mr. WRIGHT. It would seem to me that that is a reasonable analysis of the law.

Mr. NORRELL. Now, in regard to flood control in the Southwest, the total allocation of the cost of those dams to power—I do not know what that total is—you would not have it just at your fingertips, would you? I think it would be well, if you have that, to let the record show the amount. You can do that in the extension of your remarks.

(The information referred to appears on pp. 375 and 380.)

Mr. WRIGHT. Mr. Norrell, that brings up this problem: When the project is authorized, sometimes there is an amount stated, as they estimate it to be, allocated to power, and sometimes there is not, but the real trouble comes in that no reallocation of cost is made on these projects that is accepted by anybody until the project is completed and the final completion costs are available. Then, there are a half dozen or more theories or ways of allocating the costs between flood control and power, none of which have ever been definitely adapted.

Mr. NORRELL. Why has not the law regarding that been adapted, if it has not been? Where is the failure?

Mr. WRIGHT. The failure, I think, lies in the fact that none of the legislation specifically says who is to make the allocation of cost or how it is to be made.

Mr. NORRELL. We are getting right down at the heart now of the existing problem.

Mr. WRIGHT. That is correct.

METHOD OF COST ALLOCATION

Mr. NORRELL. Now, I would like you, when you check your remarks at this point in the record, to set out the different methods of allocation of costs so that we can tell just what the legal situation is, and then add to that experience in operations under the existing law, and as you see it with respect to power rates so far as the Southwest is concerned.

(The material referred to follows:)

METHOD OF COST ALLOCATION

Congressional policy with respect to cost allocations of multiple-purpose projects which include power has not been set forth in the law. Many statutes touch upon the problem but do not come to grips with it and spell out the fundamental principles to be followed by administrative agencies.

It was in response to this situation, no doubt, that led to extensive hearings on the problem of cost allocations by the Subcommittee to Study Civil Works, Committee on Public Works. This subcommittee reported its findings on December 5, 1952, in House Committee Print No. 23, 82d Congress, 2d session. Beginning at page 4 of this report the principal methods of cost allocation are described. This description is believed to be responsive to the question at this point in the hearings and is as follows:

THE BENEFIT METHOD

"The first three of the listed methods depend in varying degrees upon the benefits obtained from the various functions served. In all three, the cost allocated to any purpose will not exceed the corresponding benefits."

The benefit method name is applied to two somewhat similar methods. The first allocates the total cost of the project among the various functions in proportion to their estimated benefits. A principal difficulty in this procedure is the necessity of estimating all benefits on a comparable basis and reducing them to monetary values. It does not follow the principle of determining separable or direct costs first and then of allocating joint costs. It assumes the whole project as involving a single joint cost. The second procedure designated by the same name allocates to each function its direct cost plus a share of the joint cost in direct proportion to the estimated net benefits accruing to that function.

THE ALTERNATIVE JUSTIFIABLE EXPENDITURE METHOD

The alternative justifiable expenditure method is fundamentally but indirectly based on benefits and directly based on the justified investment for each function. That justified investment is taken to be the smaller of either the benefits ascribed to the function or the cost of the most economical alternative single-purpose project which will achieve substantially the same benefits as does that function in the multiple-purpose project. That investment sometimes called the alternative justifiable investment, represents the largest amount which could justifiably be expended on the function in the multiple-purpose project, for in most instances, no more should be spent on a purpose than (1) the value of the benefits accruing from it, or (2) the cost of producing those benefits from the least expensive alternative source.

Examples of the justifiable single-purpose alternative projects are a steam instead of hydro power plant, rail instead of water transportation, levees for flood control, or a single-purpose reservoir. As these alternative projects are hypothetical, there will be instances where the alternative for one purpose is located within the same space as the alternative of another function. This physical impossibility, however, does not prevent the use of their estimated costs in allocating the investment in a multiple-purpose project.

After each alternative justifiable investment is found, the respective direct costs in the multiple-purpose project are substracted from it in order to obtain a figure which is called remaining alternative cost.

The joint cost (which in this case is the total cost minus all the direct costs) is then allocated to each purpose in direct proportion to these remaining alternative costs. Each allocated joint cost is then added to its respective direct cost in order to obtain the total cost allocated to each function.

This method of allocation has several advantages. First, it partially avoids the inaccuracies of the simple benefits method in that it sets an upper limit on benefits which is to some extent dependent on more objective data. Second, none of the purposes will be assigned costs which are greater than the value of their services nor less than their direct cost. Third, it is tied closely to the project's original justification procedure by means of the economically feasible alternatives and the benefits of each function.

This method also has two major disadvantages. First of all, the cost of alternative projects usually will not receive as thorough an investigation as would a project contemplated for construction, and, second, the economic basis of this method is uncertain to the same extent that it is impossible for all the alternative projects to be coexistent. If all the multiple-purpose-project benefits were to be obtained from the alternatives and two or more could not be coexistent, then the uncertainty is increased as to whether these are in fact the most economical alternative sources. (This method was used by TVA, see pp. 12, 13.)

THE SEPARABLE-COSTS, REMAINING-BENEFITS METHOD

The separable-costs, remaining-benefits method is a relatively new formula, which has been proposed for general adoption by the Federal Interagency River Basin Committee.

It is fundamentally a variation of the alternative justifiable expenditure method. The figures used for allocation are again the estimated costs of economically feasible alternatives or their respective benefits, whichever is lower. In this method instead of subtracting the direct costs from the justifiable alternative (or the benefits) of each function, the separable costs are subtracted leaving a figure which is called the remaining benefits. These remaining benefits will usually be smaller than the remaining alternative costs of the alternative justifiable expenditure method and thus the proportionate allocation to each function will be slightly different. Also, the joint costs will be less than those of the alternative justifiable expenditure method as they will be the total cost less all the separable (instead of direct) costs.

These joint costs are then allocated among the different purposes in direct proportion to the calculated remaining benefits and added to their respective separable cost in order to find the total investment for each function.

As this method is very similar to the alternative justifiable expenditure method it has the advantages and disadvantages listed for that method, except that the minimum allocation to each function will be the cost of adding that purpose to the project, or in other words, the separable cost of each function. (A detailed description of this method is set forth in chapter V of Proposed Practices for Economic Analysis of River Basin Projects made by a subcommittee of the Federal Interagency River Basin Committee in May 1950.)

USE OF FACILITIES METHODS

The use-facilities theory is based on the premises that the joint costs should be proportioned among the various functions according to their amount of "use" of the joint facilities.

In application of this method, the joint cost, which is usually the total cost of the project minus all the direct costs, is allocated to each function in direct proportion to its respective use of the joint facilities. The total cost allocated to each function is its share of the joint cost plus its direct cost.

This theory, however, has two major difficulties: (1) What is "use"? and (2) how are the different uses to be compared?

Two different approaches are taken in determining the use of the facilities, storage capacity, and quantity of water released. At one extreme, flood control is directly related to the capacity of the reservoir to store water. At the other extreme, irrigation is primarily dependent on the volume of the water released. Navigation and power lie in an intermediate position in that they are dependent on both the volume of water released and on the head (which in turn is dependent on capacity) through which that volume falls. It should be noted at this time that while it is possible to express all the major functions' uses in terms of capacity, it is not easily done unless the plans of operation definitely assign portions of the total capacity to the particular purposes. The major difficulty lies in the fact that the reservoir may be emptied and refilled many times a year while the capacity remains a fixed volume.

If the capacity approach is used, then each function is assigned capacity on the basis of readiness to serve, not on capacity actually used. That capacity which is assigned to each use is its exclusive capacity and the entire capacity which it jointly uses with other functions. Thus, the total capacity assigned to the various uses need not be identical with the total reservoir capacity.

The chief merits of this basic theory is that it charges each function according to the magnitude of its use or its readiness to use the joint facilities. On the other hand, it is difficult to evaluate the different uses; further, after evaluation, the different forms of usage in many instances cannot be compared to the extent that there may be a reasonable and equitable method of cost allocation.

If either the static-capacity approach or the dynamic-water-release approach is used alone, then there may be a relatively unrealistic approach toward those uses which do not primarily use the project in the manner in which the allocation is based. The water-released approach is not an entirely satisfactory method if the water is released for more than one use; nor is it completely satisfactory in apportioning the dead-storage capacity. If the capacity approach is used it neglects the dynamic variations and so may fail to measure the reasonable use by the function of the project.

If the two approaches could be satisfactorily reconciled in one single method, the use-of-facilities method would be of far greater value. However, as it now is, it may serve as a useful check on other methods of cost allocation.

SEPARATE PROJECTS METHOD

The separate projects method may divide either (1) the total cost of the project, or (2) the joint costs (after first allocating the direct or separable costs to the functions) in proportion to the cost of obtaining the benefits by a single-purpose project. The second version of this method is, in general, the same as the alternative justifiable-expenditures method, except that the alternative project need not be justified.

This method has not been widely accepted as the cost of an alternative single-purpose project may be far beyond the benefits which may accrue from that function and thus may result in an unreasonable allocation.

EQUAL APPORTIONMENT METHOD

Since there is no single fixed mathematical formula for allocating costs, it has been asserted that either all the costs of the project or just the joint costs should be apportioned equally as a commonsense rule of equity.

It can be readily seen that the results of such a method would not be reasonable if the respective functions and the respective benefits of the functions were not approximately equal.

PRIORITY OF USE METHOD

In a multiple-purpose project, the various purposes to some extent compete with each other for the use of the water or storage space. The functions have different timing for the periods for optimum storage and release of water and thus all of them cannot be served in an optimum manner.

If some of functions are served proportionately more than others, the priority of use method will give special consideration to such priorities.

The priority-use method assigns direct costs entirely to the individual purpose served by such costs and assigns the remaining joint costs to project purposes in a descending order of priority. Thus, the top-priority purpose is charged with joint costs equal to the lesser of two amounts: (1) The benefits less specific costs assigned to that purpose, or (2) the cost of the most economical alternative, less specific costs assigned to that purpose. The remaining joint costs are then allocated in the same manner to the other functions in order of priority. In this way the highest priority functions are assigned the maximum allocation represented by alternative joint expenditures for those purposes, thereby relieving the lower priorities from sharing the joint costs.

This method is based on the premises that if a project is to be operated primarily for one function and secondarily for another, the primary purpose should be charged with a greater portion of the costs. However, such an approach may give results which are sufficiently different from the other methods and for that reason may be considered disproportionate and unrealistic. When the results of this method are computed, they are usually compared with the results of other methods in order to check their reasonableness or in order to modify them

THE INCREMENTAL METHOD

The incremental method allocates the separable costs to their respective purposes and the total joint cost to one basic purpose which is considered the principal or basic function of the project. For example, in a triple-purpose project, electric power and navigation may be charged only their separable costs, while flood control would be charged not only with its separable cost but with the entire joint cost as well.

In some cases this method is used in conjunction with one of the other methods. If that is done, then one or more purposes are charged only their separable costs, and the remaining costs are apportioned among the others by some different method of allocation.

This method is advantageously used where some of the functions are added to the project subsequent to original authorization. For instance, if a project is justified and authorized solely for flood control and navigation, then if electric power is incidentally added before or during construction, it may properly be charged only with its separable costs.

This method should be used only on those functions which are clearly indicated through the history of the project or by some other facts as only incidental purposes of the project. As the examples will show, this method has sometimes been used to justify a preconceived result which is totally inconsistent with the results of other methods.

DIRECT-COSTS METHOD

This method is a variation of the incremental method. Instead of the separable costs being charged to the incidental functions, only the direct costs are allocated to those functions. The remaining joint costs are then charged to the primary functions.

There is justification for using this method where the function is added after the project has been completed. In many cases, dams are built containing only penstocks but no other facilities for power generation. If the generating facilties are later added, then it is quite reasonable to charge power with only its direct costs.

Mr. NORRELL. I think you will agree with me that we have rather encouraged in certain sections of the country what might be considered by, at least a few people, as subsidizing, or, at least, paying part of the cost of power that is consumed by the people.

As the chairman has indicated, we are going to reach the time when this Nation is not going to stand for subsidizing power, and not do it on an equal basis throughout the entire Nation.

I want my people to have equal treatment by the Federal Government and I think the people in other States want to have as good contracts as we get in Arkansas.

NEGOTIATIONS WITH ARKANSAS UTILITIES

Under existing law, though, as it stands today, the only solution I see is these wheeling contracts which you mentioned, and I agree with what you said. I would like to ask for the up-to-date status of the negotiations between the Southwestern Power Administration and the utilities in Arkansas.

Mr. WRIGHT. The status is that we have drafted, and I have available here a contract, which is entitled "Draft M5R," plus suggestions for further negotiations, dated December 15, 1952. The companies have this draft in their possession, prepared by the Government, considering it, and they advised me at a meeting the latter part of January, as soon as they got it and chose among themselves to continue the negotiations, which they believed would be in the next couple of months, they would get with me and complete the negotiations on this contractual arrangement.

Mr. NORRELL. The contract as you have it there is satisfactory to the Southwestern Power Administration anyway?

Mr. WRIGHT. That is correct. We have some items of rates in here that must be negotiated, but I would say, in general terms, this contract offers a satisfactory solution to the problem.

Mr. NORRELL. Yes, sir. Have the utilities expressed any off-the-record statements about the contract as to whether it is substantially satisfactory with them?

Mr. WRIGHT. Yes, sir; I think so.

Mr. NORRELL. Do you have a mimeographed copy of the contract there?

Mr. WRIGHT. Yes, sir.

Mr. NORRELL. Would you mind letting me have one of them?

Mr. WRIGHT. I would not, sir.

Mr. NORRELL. I want to congratulate you, Mr. Wright, for the untiring efforts that you have made in connection with these contracts in my section of the country. I want to state to my chairman and other members of the committee, that I think had your recommendations been carried out, we would have had very fine, hormonious and peaceful relationships down there and we will have, I am sure, ultimately. I think you have done a very good job.

Mr. WRIGHT. I appreciate that, sir.

Mr. NORRELL. Now, getting to the Supreme Court's decision. As I understand it, there were two problems involved there. I have not read the decision and I do not know much about it, except, as Will Rogers used to say "What I have read in the papers." Incidentally, I have not had any interest personally to assert either way. I have simply said to my constituents down there, we are trying to give the Southwestern Power Administration what money they need and the committee will always try to go along with the law, whatever it is. Incidentally, at this point I am glad you left with us a statement so adequately showing the appropriations that we made during the years of Southwestern's existence. I think that is a splendid record, Mr. Chairman, when he showed how much money had gone back to the Treasury year by year, which were appropriated sums.

Mr. JENSEN. It certainly was.

Mr. NORRELL. That statement showed two things as I understand it, and if I am in error, I would like so be corrected.

First, it showed that we always appropriated as much money as was needed for the use of the Southwestern Power Administration, and, second, it showed that the Southwestern Power Administration tried to operate on an economical basis and that they did operate on that kind of a basis and that year by year they handed back to the Treasury money they could have expended. I want to say that is most commendable.

Mr. JENSEN. Yes, and is so out of the ordinary in regard to the custom of Federal agencies, that it should be written all over the wall for all Americans to see.

Mr. NORRELL. I want the record to show that if all agencies in the Government would just take the appropriation that we make here and during the year use what money they actually and honestly need and turn the balance at the end of the year back to the Treasury, the Government agencies would not have much trouble about their appropriations.

There are so many agencies, though, if they have a dollar left along toward the end of the fiscal year, they definitely determine to spend it, and, consequently, we cannot trust them. I want to say it builds up my trust in the Southwestern Power Administration when I see that; regardless of the money you had in your pockets, you did not spend any more than you had to. I think it is very commendable.

Mr. WRIGHT. Thank you.

Arkansas Supreme Court Decision

Mr. Norrell. Getting back to the Court decision.

The two questions, I understand, were (1) the State law as to the legal authority of the cooperatives down there to construct the steam plants—I understand the Supreme Court said there was not statutory authority in the State of Arkansas to do that, and (2) that the Southwestern Power Administration had no federal authority to operate the steam plant, or carry out your part of the contract.

Mr. Wright. Yes, sir.

Mr. Norrell. Now, I used to think I was a lawyer. I do not know now whether I am now, but under the system of several years ago, there were two ways that you could get to the United States Supreme Court. I have thought about whether there could be an appeal taken to the United States Supreme Court from the Arkansas State Supreme Court.

An appeal from the Supreme Court of the State could be taken if the court decision had affected in any way a question declaring an act of Congress void. The other way of getting to the Supreme Court, as I recall, was by certiorari. That would be granted by the Supreme Court of the United States if a Federal act was involved and if a reversal of the decree of the State supreme court would give the desired relief to the party desiring the review. That is, it would be sufficient for the losing side to win in the United States Supreme Court.

This was in Arkansas a double-barreled thing. The case could be carried to the United States Supreme Court, if the decision of the Court would be sufficient to reverse the case and obtained the relief that they desire. But, the other angle, which is solely regarding an Arkansas statute would block that relief. So, under the procedure that existed when I was practicing law, the relief could not be granted. The Arkansas statute was involved, and the Arkansas Supreme Court has held, regarding the Arkansas statute, that the REA had no Arkansas law under which they could do what they were doing. So, they would not grant a writ of certiorari. Is that the situation which you have heard about?

Mr. Wright. That is my understanding of the case.

Mr. Norrell. I think that is probably the law.

The Missouri Suit

Do you know the status of the litigation pending in Missouri regarding these steam plants?

Mr. Wright. Do you mean in the Federal district court?

Mr. Norrell. There is a lawsuit pending in Missouri at this time, according to my understanding.

Mr. Wright. There is a suit pending in the Federal district court, which is referred to as the Missouri suit.

Mr. Norrell. That is what you referred to awhile ago?

Mr. WRIGHT. That is right. The status of that is that oral arguments, I believe, were finished and the litigation closed on January 12, and final arguments in the case were taken under advisement by the judge and the decision on that is momentarily expected, but no one can actually say. It was tried in Judge McLaughlin's court and the trial took some 2 weeks, or more.

BLAKELY MOUNTAIN PROJECT

Mr. NORRELL. I think I know when Blakely Mountain project is expected to come in, but I have temporarily forgotten. Will you give me that date?

Mr. WRIGHT. June 1954 is the now scheduled date. We expect, incidentally, that a separate contract will be entered into with Blakely Mountain, probably with the Arkansas Power & Light Co., because it is not a part of the integrated system.

ADVANTAGE OF INTEGRATION

Mr. JENSEN. Mr. Wright, is there anything else which you wish to cover?

Mr. WRIGHT. Mr. Chairman, there is one other thing I want to point out to you that I have missed. I think the greatest advantage that has accrued from the contracts between the Government and the companies, is this, and I think the Congress ought to know that: When we are serving through a company power to one of these preferred customers, there may come a time when the Government has no more power to give that customer and his requirements are such that he needs more power. Under our arrangements with the companies that customer is already connected up to the system of the power company and he can get the additional power he needs. So, therefore, in the Southwest should Congress be told that you have assumed a primary responsibility as power suppliers in the Southwest, and, therefore, because it is your primary responsibility, you have to build some other source of power immediately, or the area will be without power. The need for power in the Southwest will be governed by how much peaking power can be economically and feasibly absorbed into the total operation in the Southwest, not by the fact that somebody needs power. In other words, a co-op once being served through a relationship between the Government and the company, automatically has every power resource of that area at his command for power supply. I think that is the greatest thing on company contracts.

Mr. JENSEN. He has the power resources of the whole area available to him by the simple fact that you have, or will without a doubt very soon complete these contracts with private utilities, and so you will have available to the people of that Southwestern area the Southwestern Power, integrated with the private utilities power, integrated with REA power and with municipal power plants?

Mr. WRIGHT. That is correct.

COMPLETE POWER COVERAGE

Mr. JENSEN. In other words, you are all tied together into one large grid system which will guarantee adequate power for any purpose in that area?

Mr. WRIGHT. That is correct. The companies are encouraged to build their part of it by virtue of these arrangements and they know what the Government is going to do with their power.

Mr. JENSEN. I think that is wonderful and I think, while it has taken many, many long years and a lot of discussion and debate and argument by the Southwestern Power Administration, the utilities, the REA, this committee and the Congress, it has all borne good fruit.

Mr. WRIGHT. Thank you, sir.

Mr. JENSEN. I think you deserve much credit for that, Mr. Wright.

Mr. WRIGHT. Thank you, sir.

Mr. JENSEN. So, if there is nothing else, we will say "thank you."

Mr. WRIGHT. Thank you, gentlemen, for your kind consideration.

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